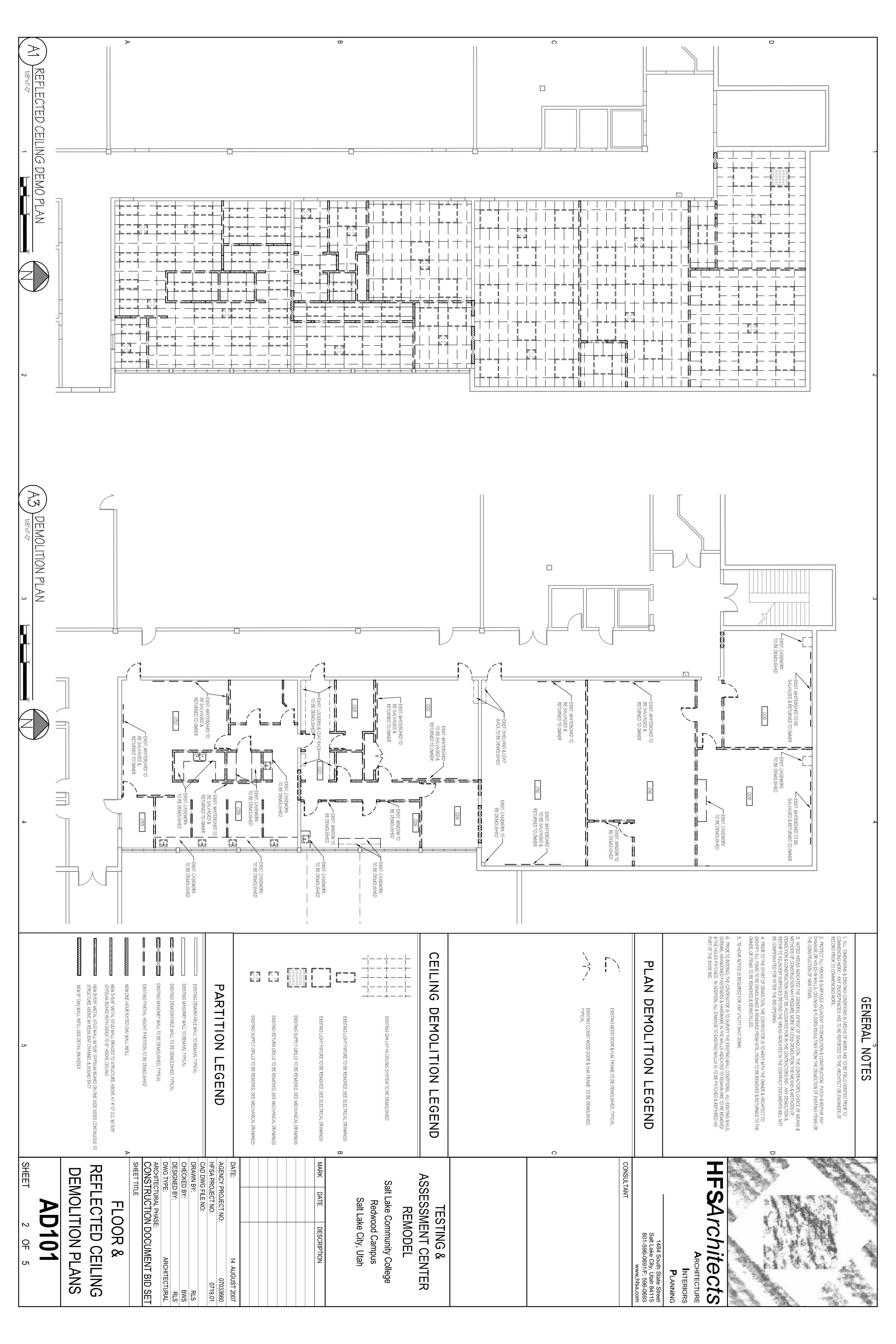
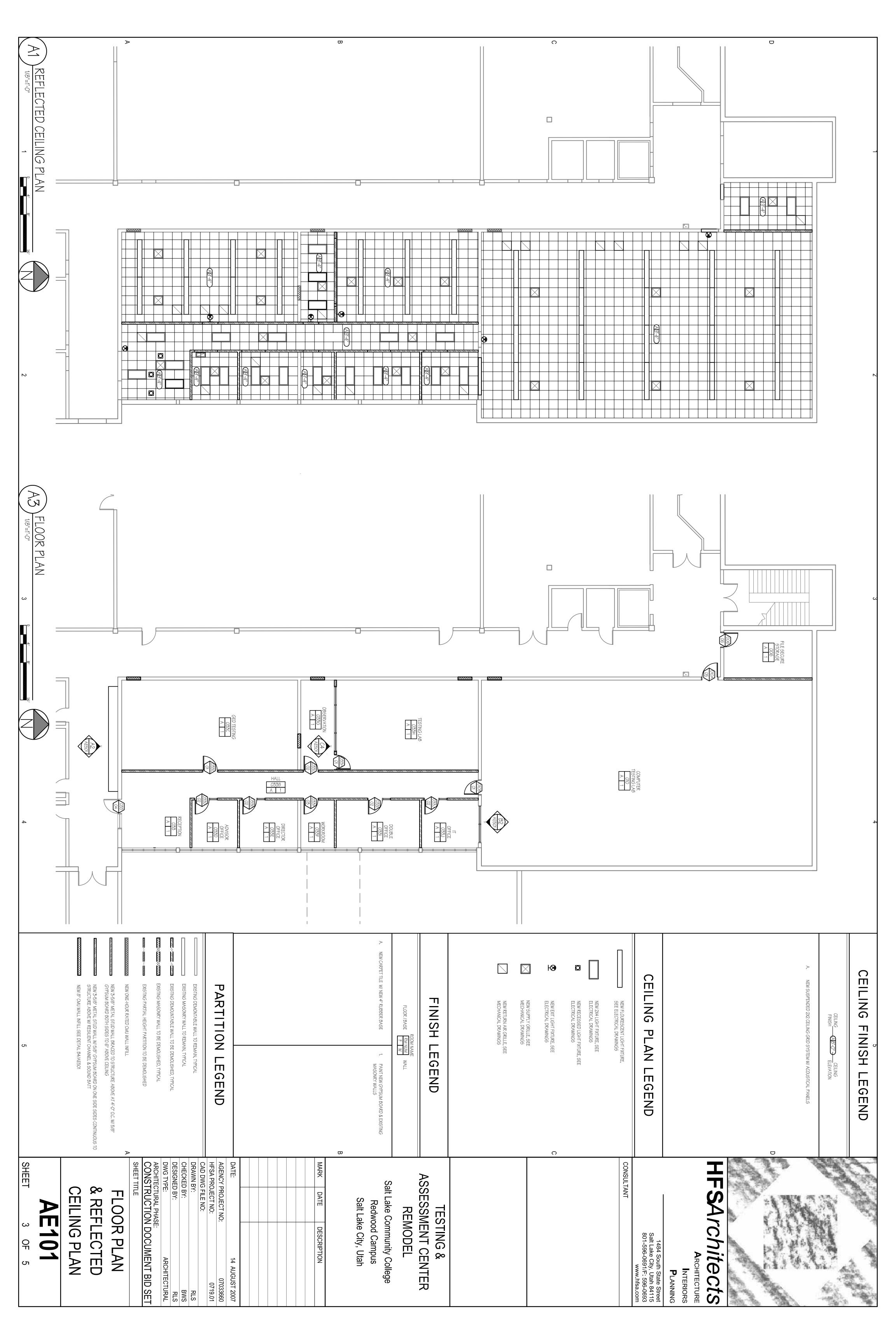
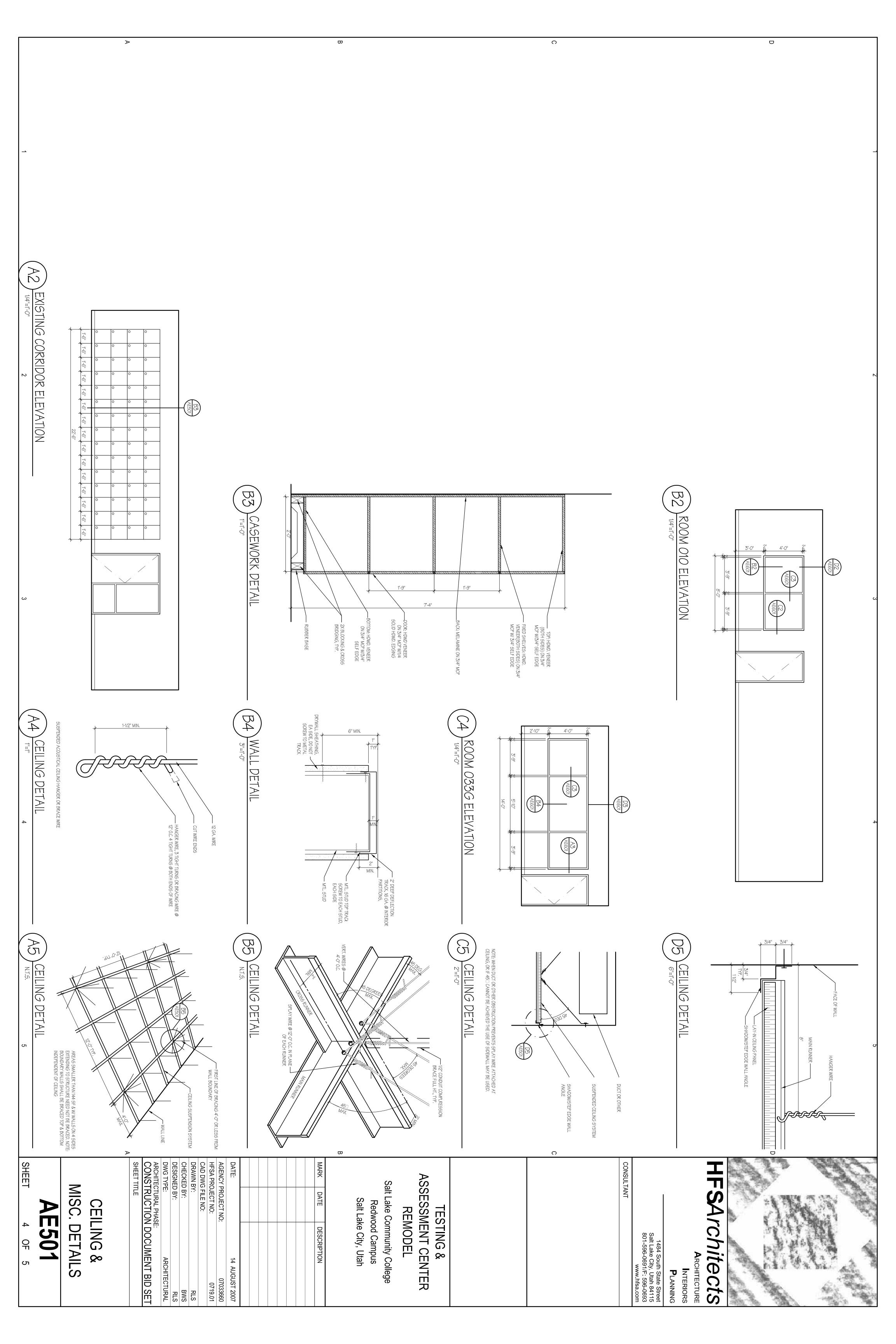
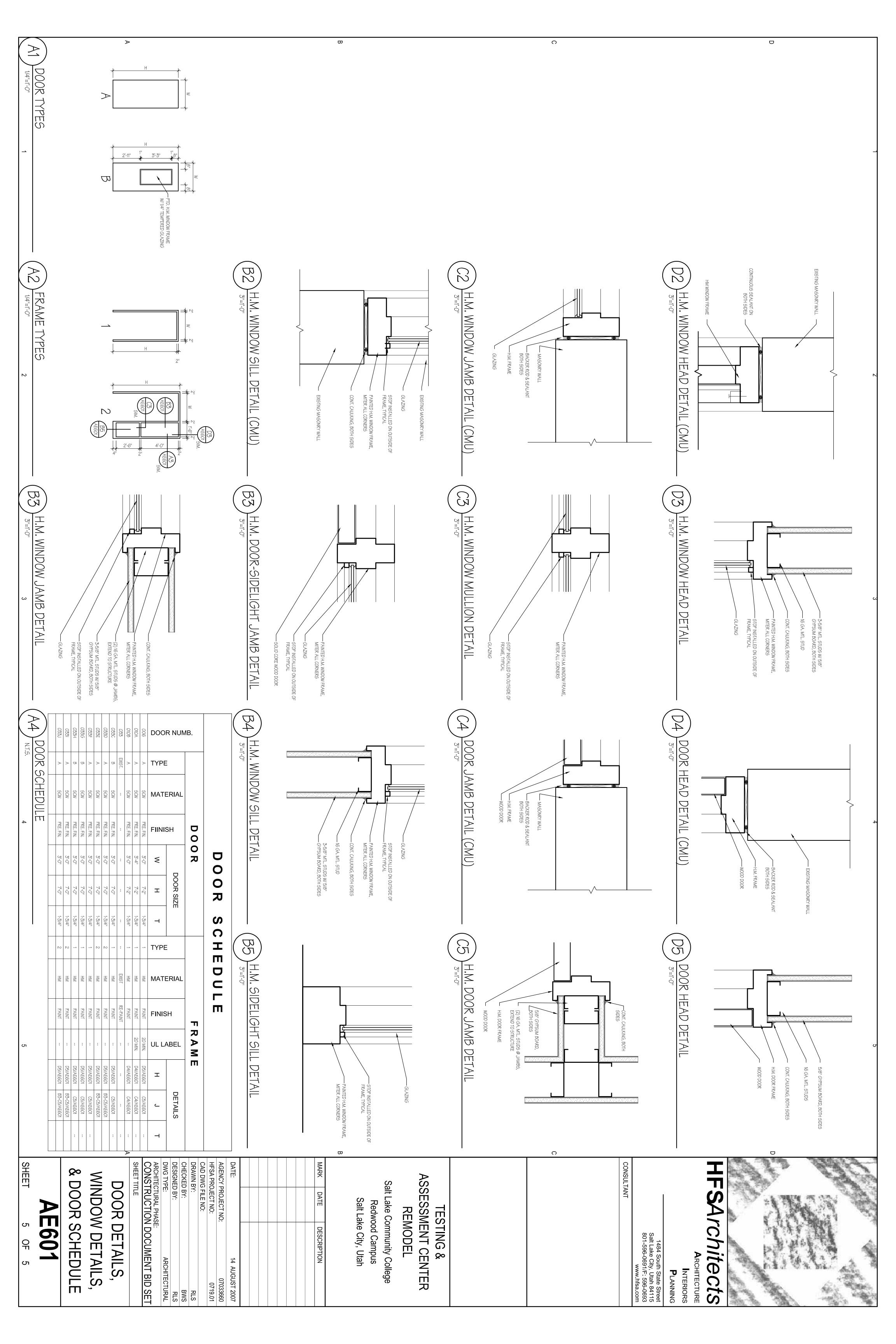
### $\circ$ **GENERAL ABBREVIATIONS** $\times$ **MATERIALS LEGEND GRAPHIC SYMBOLS** CMU LIMESTONE WOOD (BLOCKING) GYPSUM BOARD DOOMATA MARBLE CAST STONE STONE TO REMOVE BATT INSULATION BACKER ROD AND Salt Lake Community Coll FOOTNOTES: 1) In case of conflict with the U.S. Department of Justice Federal Registers Parts I through **Y** - ADA Guidelines and specific reference to the International Building Code Accessibility Chapters, the more restrictive requirement shall govern. Minimum Number of Required Plumbing Facilities: a) Water Closets - Required (m) N/A (f) N/A P b) Lavatories - Required (m) N/A (f) N/A P c) Bath Tubs or Showers: N/A Service Sinks: N/A DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT 4110 State Office Building/Salt Lake City, Utah 84114/538-3018 Type of Cons Exit Width Required: Design Occupant Load: Seismic Design Category: Change in Use: Yes \_\_\_\_\_ No $\_^{\chi}$ \_ Mixed Occupancy: Yes Special Use and Occupancy (e.g. High Rise, Covered Mall): $\_^{\chi}$ State of Utah-Department Fire Resistance Rating Requ separation distance (in hours): Fire Resistance Rating Requ Mixed Occupancies: Actual Area per Floor (square feet): Number of Stories: Additional Code Information shall be provided at the discretion of the Building Official for Complex Buildings. Including, but not limited to: a) High Rise Requirements. Required: Atriums. Performance Based Criteria. Means or Egress Analysis. Fire Assembly Locator Sheet. Exterior and Interior Accessibility Route. Fire Stopping, Including Tested Design Numb Unlimited Area Building: Sum of the Ratio Calcula tal Aliv. One Story: $\frac{1}{A_a(2)}$ Two Story: $A_a(3)$ $= A_t + \left[ \frac{A_t I_f}{100} \right] + \left[ \frac{A_t I_s}{100} \right]$ **CODE ANALYSIS** <u>→</u> APPLICABLE CODES \_ Building Height: ®|**⊨** nts for Building Eler Exit Width Provided: of Administrative Services Design Wind Speed: $I_f = 100 \left[ \frac{F}{P} \right]$ ents (hours). -0.25 $\frac{W}{30}$ ⊳∣⋈ mph ₽₩ N<sub>O</sub> (f) 0 ege ELECTRICAL DRAWINGS MECHANICAL DRAWINGS ARCHITECTURAL DRAWINGS TITLE SHEET, GENERAL INFO, & SHEET INDEX FLOOR AND REF. CEILING DEMOLITION PLAN NEW FLOOR AND REF. CEILING ELECTRICAL DETAIL & REFERENCE PLANS MECHANICAL SCHEDULES DOOR SCHEDULE, DOOR & WINDOW DETAILS LIGHT & POWER PLAN PROJECT DIRECTORY WHW Engineering Inc. 1354 East 3300 South, Suite 200 Salt Lake City, Utah 84106 801-466-4021/FAX-466-8536 Thomas and Kolkman Engineering 64 West 1700 South Salt Lake City, Utah 84115 801-484-8161/FAX: 801-484-3538 **DRAWING INDEX** MECHANICAL ENGINEER HFS Architects 1484 South State Street Salt Lake City, Utah 84115 801-596-0691/FAX-596-0693 ELECTRICAL ENGINEER ARCHITECT D ₩ HFSA PROJECT NO: CAD DWG FILE NO: DRAWN BY: SHEET CHECKED BY: DESIGNED BY: DWG TYPE: MARK DATE CONSULTANT SHEET TITLE ARCHITECTURAL PHASE: CONSTRUCTION DOCUMENT BID SET AGENCY PROJECT NO: ASSESSMENT CENTER Salt Lake Community College GENERAL INFO, COVER SHEET, DATE SHEET INDEX Salt Lake City, Utah Redwood Campus TESTING & REMODEL DESCRIPTION 1484 South State Street Salt Lake City, Utah 84115 801-596-0691/F: 596-0693 www.hfsa.com **A**RCHITECTURE ARCHITECTURAL AUGUST 2007 NTERIORS PLANNING 07033660 0719.01 RLS BWS RLS









|            | 1        |   |                                       |      | MECHANICAL  | LEGEN                                  | 1D     |   |              |
|------------|----------|---|---------------------------------------|------|---|--|--------|---|--------------|
| SYMBOL     | ABR.     | DESCRIPTION   | SYMBOL                                | ABR. | DESCRIPTION   | SYMBOL                                 | ABR.   | DESCRIPTION   | -            |
|            |          | GENERAL TERMINOLOGY   |                                       |      | AIR SIDE  |  |        | WET SIDE  |              |
| A          |          | SECTION LETTER DESIGNATION  | <b>₩</b>                              |      | EXISTING AIR DUCT TO BE REMOVED   |  |        | PUMP  | <u> </u> =   |
| ME-101/    |          | - SECTION DRAWN ON THIS SHEET                                     | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |      | EXISTING AIR DUCT TO REMAIN   |  | PSD    | PUMP SUCTION DIFFUSER                                 | C            |
| (A2)       |          | - DETAIL NUMBER DESIGNATION                                       | <b>₩</b>                              |      | NEW AIR DUCT  |  |        |   | -            |
|            |          | CORRESPONDING WITH GRID LOCATION                                  | 江草                                    |      | RECT. TO RECT. AIR DUCT TAKE-OFF  |  |        | UNION   | ┸            |
| AH         |          | - MECHANICAL EQUIPMENT DESIGNATION                                | 江草                                    |      | RECT. TO RND. AIR DUCT TAKE-OFF   | Γ                                      |        | MANUAL ACTUATOR (BALL,                                | _            |
| 1          | <u> </u> | - EQUIPMENT ITEM DESIGNATION                                      | 江南                                    |      | RND. TO RND. AIR DUCT TAKE-OFF  |  |        | BUTTERFLY, NEEDLE, ETC. VALVES)                       | ╀            |
| D-1        |          | REGISTER, GRILL OR DIFFUSER DESIGNATION WITH BALANCING CFM LISTED | <b>├</b> र्रि <b>म</b> ्रीम           |      | RECT. TAKE-OFF AT END OF MAIN   | Т                                      |        | MANUAL ACTUATOR (GATE, GLOBE, S&D, OS&Y, ETC. VALVES) | L            |
| CFM        |          | BELOW   | \\                                    |      | BURIED OR UNDER FLOOR DUCT  |  |        | S&D, US&1, ETC. VALVES)                               | ╀            |
| R-1        |          | GRILLE, OR LOUVER DESIGNATION WHERE BALANCING NOT REQUIRE         | Summing                               |      | FLEXIBLE AIR DUCT   |  |        | PNEUMATIC DIAPHRAGM ACTUATOR                          | ╀            |
|            |          |   |                                       |      | LINED DUCT  | М                                      |        | ELECTRIC MOTOR ACTUATOR                               | $\perp$      |
| <u>^</u>   |          | REVISION DESIGNATOR AND NUMBER                                    |                                       |      | VANED ELBOW   | S                                      |        | SOLENOID ACTUATOR                                     | 丰            |
|            |          | KEY NOTE DESIGNATOR AND NUMBER                                    |                                       |      | RADIUS ELBOW  |  |        | THREADED OR SWEAT VALVE CONNECTION                    | 丰            |
| •          | POC      | POINT OF CONNECTION   |                                       |      | CONCENTRIC DUCT TRANSITION  |  |        | FLANGED VALVE CONNECTION                              | _            |
| <u> </u>   | POR      |   |                                       |      | ECCENTRIC DUCT TRANSITION   | <u> </u>                               |        | BUTTERFLY VALVE                                       | $\downarrow$ |
| AFF        |          | ABOVE FINISHED FLOOR  | ₩ -VD                                 |      | FLEXIBLE AIR DUCT   | <del></del>                            |        | GATE VALVE  |              |
| AP         |          | ACCESS PANEL  | →VD<br>→ → →                          |      | VOLUME DAMPER   |  |        | GLOBE VALVE - STRAIGHT PATTERN                        | +            |
| ₽EL.       |          | CENTER LINE ELEVATION   |                                       |      | SUPPLY AIR DIFFUSER   |  |        | GLOBE VALVE - ANGLE PATTERN                           | +            |
| INV. ELEV. |          | INVERT ELEVATION  |                                       |      | RETURN AIR, FRESH AIR, AND TRANSFER AIR CEILING MOUNTED EXHAUST FAN OR  | <u>M</u><br><u>M</u>                   |        | MOTORIZED 2-WAY CONTROL VALVE                         | _            |
| GC         |          | GENERAL CONTRACTOR  |                                       |      | EXHAUST GRILLE  | <u>M</u>                               |        | MOTORIZED 3-WAY CONTROL VALVE                         | +            |
| MC         |          | MECHANICAL CONTRACTOR   |                                       |      | RETURN OR OUTSIDE AIR DUCT UP   |  |        | CHECK VALVE   | +            |
| CC         |          | CONTROL CONTRACTOR  |                                       |      | SUPPLY DUCT UP  |  | PRV    |   | +            |
| EC         |          | ELECTRICAL CONTRACTOR   |                                       |      | EXHAUST AIR INTAKE UP   | —————————————————————————————————————— | PRV    |   | 4            |
| FPC        |          | FIRE PROTECTION CONTROL   |                                       |      | RETURN OR OUTSIDE AIR DUCT DOWN   | <u>\$</u>                              | CBV    |   | 4            |
| NIC        |          | NOT IN CONTRACT   |                                       |      | SUPPLY DUCT DOWN  | <u> </u>                               | BV     | BALL VALVE  | 4            |
| NTS        |          | NOT TO SCALE  |                                       |      | EXHAUST DUCT DOWN   | SA                                     |        | SUPPLY AIR  | 4            |
| VCP        |          | VITRIFIED CLAY PIPE   | H 100                                 |      | ROUND DUCT UP   | RA                                     |        | RETURN AIR  | 4            |
| C          |          | COMMON  |                                       |      | LOWER DUCT DOWN   | EA                                     |        | EXHAUST AIR   | 4            |
| NC NC      |          | NORMALLY CLOSED   | R                                     |      | FLEXIBLE DUCT CONNECTION  | OA                                     | T 0T4T | OUTSIDE AIR   | 4            |
| NO         |          | NORMALLY OPEN   |                                       |      | LOWER DUCT DOWN   | $\overline{}$                          | I-SIAI | WALL MOUNTED TEMP OF NOOR                             | 4            |
|            |          |   |                                       |      | FLEXIBLE DUCT CONNECTION  | S                                      |        | WALL MOUNTED TEMP. SENSOR                             | 4            |
|            |          |   |                                       |      | PARALLEL BLADE DAMPER   |  |        |   | -            |
|            |          |   |                                       |      | OPPOSED BLADE DAMPER  |  |        |   | $\dashv$     |
|            |          |   |                                       |      | HUMIDIFIER  AUDELOW MEASURING STATION   |  |        |   | +            |
|            |          |   |                                       |      | AIRFLOW MEASURING STATION   |  |        |   | +            |
|            |          |   |                                       |      | FILTER BANK   |  |        |   | 4            |
|            |          |   |                                       | ΛD   | COIL ACCESS DANIEL  |  |        |   | +            |
|            |          |   |                                       | AP   | ACCESS PANEL  EXISTING EQUIPMENT TO BE REMOVED  |  |        |   | ╛            |
|            |          |   |                                       |      |   |  |        |   |              |
|            |          |   |                                       |      | EXISTING EQUIPMENT TO REMAIN  NEW EQUIPMENT   |  |        |   |              |
|            |          |   | M                                     | MVD  |   |  |        |   |              |
|            |          |   | BD                                    | BD   | BACKDRAFT DAMPER  |  |        |   |              |
|            |          |   | F                                     | FD   | FIRE DAMPER   |  |        |   |              |
|            |          |   | R                                     | RD   | RADIATION TYPE FIRE DAMPER  |  |        |   |              |
|            |          |   | s                                     | SD   | SMOKE DAMPER  |  |        |   |              |
|            |          |   | F9                                    |      | FIRE & SMOKE DAMPER   |  |        |   |              |
|            |          |   |                                       |      | THE RESIDENCE OF THE PROPERTY |  |        |   |              |

FS | FIRE & SMOKE DAMPER

GENERAL NOTES:

G-1

MECHANICAL INFORMATION IS NOT LIMITED TO THE MECHANICAL DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR INFORMATION ON ALL OTHER CONSTRUCTION DOCUMENTS INCLUDING DRAWINGS BY OTHER DISCIPLINES AND SPECIFICATIONS.

A - EACH DRAWING SHEET AND THE SPECIFICATIONS HAVE BEEN PREPARED TO SUPPLEMENT EACH OTHER AND THEY SHALL BE INTERPRETED AS AN INTEGRAL UNIT WITH ITEMS SHOWN AND NOTED ON ONE AND NOT THE OTHER BEING FURNISHED AND INSTALLED AS THOUGH SHOWN AND CALLED OUT IN ALL PLACES. ITEMS IN SPECIFICATIONS OR DRAWINGS LISTED WHICH ARE DIFFERING IN EFFICIENCY OR QUALITY SHALL BE HELD TO THE GREATEST OF: EFFICIENCY, QUALITY OR GOVERNING CODE.

B - THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE INSTALLATION OF THE SYSTEMS ACCORDING TO THE TRUE INTENT AND MEANING OF THE CONTRACT DOCUMENTS.

C - THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT WITH PROPER SERVICE ACCESS AND CLEARANCES ACCORDING TO MANUFACTURERS RECOMMENDATIONS. THE CONTRACTOR SHALL REVIEW SUPPLIERS BID PACKAGES FOR COMPLETENESS AND COMPLIANCE TO THE SPECIFICATIONS, SCHEDULES, AND DESIGN INTENT (ALL EQUIPMENT AND METHODS). THE CONTRACTOR SHALL REMOVE AND REINSTALL CORRECTLY AT HIS OWN EXPENSE ANY EQUIPMENT NOT IN COMPLIANCE.

D - THE CONTRACTOR SHALL CONSULT MANUFACTURERS
INSTALLATION INSTRUCTIONS FOR SIZES, METHODS, ACCESSORIES,
AND CLEARANCES IN SPACE AVAILABLE PRIOR TO BIDDING PROJECT.

MAKING APPLICATION TO THE ENGINEER IN WRITING.

E - ANYTHING NOT CLEAR OR IN CONFLICT WILL BE EXPLAINED BY

G-2 ANY AND ALL ALTERATIONS TO THE SYSTEM SHOWN SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR. ARCHITECT SHALL BE NOTIFIED IN WRITING PRIOR TO CHANGES.

G-3 CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND LOCATIONS.

THE WORKING DRAWINGS ARE DIAGRAMMATIC. THEY DO NOT SHOW EVERY OFFSET, BEND, OR ELBOW NECESSARY FOR THE COMPLETE INSTALLATION IN THE SPACE PROVIDED. ALL LOCATIONS FOR MECHANICAL EQUIPMENT SHALL BE FIELD VERIFIED AND COORDINATED WITH ALL DRAWINGS. THE CONTRACTOR SHALL PROVIDE OR COORDINATE WITH THE GENERAL CONTRACTOR PROVISIONS FOR BLOCKOUTS OR CORE DRILLS THROUGH STRUCTURE.

THE INSTRUCTION TO "PROVIDE" ALSO INCLUDES INSTALLATION.

G-6 MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL SMOKE AND FIRE DAMPERS AS REQUIRED BY LOCAL CODES AND AUTHORITIES.

G-7 SHEET METAL DUCT SIZES SHOWN ON DRAWINGS ARE FREE AREA DIMENSIONS.

PROVIDE AND INSTALL BALANCING DAMPERS IN ALL SUPPLY AND EXHAUST AIR BRANCH DUCTS. BALANCE TO CFM SHOWN ON PLAN.

G-9 SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF DIFFUSERS AND GRILLES.

PROVIDE TURNING VANES IN ALL ELBOWS OF RECTANGULAR DUCT.

G-11 THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY IN HANDLING AND DISPOSING OF REFRIGERANTS, OILS, ETC. ALL SUCH MATERIALS SHALL BE HANDLED, DISPOSED, AND USED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL LAWS.

G-12 THE MECHANICAL CONTRACTOR SHALL VERIFY MOTOR VOLTAGES WITH THE ELECTRICAL DRAWING BEFORE ORDERING MOTORIZED EQUIPMENT AND CONTROLS.

C.F.M. LISTED IS ACTUAL AIR.

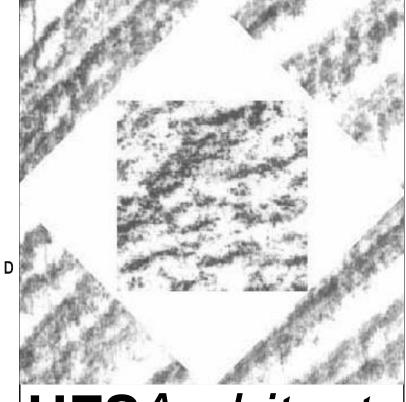
G-14 SUPPLIERS SHALL REVIEW ALL DRAWINGS AND THE SPECIFICATIONS PRIOR TO SUBMITTING PRICES TO THE CONTRACTOR. ALL QUESTIONS AND DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEERS ATTENTION PRIOR TO BIDDING.

G-15

CONTRACTOR SHALL THOROUGHLY REVIEW AND SIGN SUBMITTALS
FOR COMPLETENESS AND COMPLIANCE TO THE SPECIFICATIONS
PRIOR TO ENGINEERS REVIEW. SUPPLIERS SHALL HIGHLIGHT OR MARK
ALL INFORMATION REQUIRED TO SHOW COMPLIANCE TO THE
SPECIFICATIONS. ALL REQUESTED EXCEPTIONS TO THE
SPECIFICATIONS, OR SCHEDULES SHALL BE CLEARLY NOTED AND
EXPLAINED. SUBMITTAL REVIEW AND ACCEPTANCE IS FOR DESIGN
CONCEPT ONLY, AND DOES NOT AT ANY TIME RELIEVE THE
CONTRACTOR OF RESPONSIBILITY TO MEET SPECIFICATIONS,
CAPACITIES, OR DESIGN INTENT.

ALL MECHANICAL SHALL BE INSTALLED AND CONFORM TO THE 2006 EDITION OF THE IMC WITH UTAH ANNOTATIONS AND LOCAL AUTHORITY REQUIREMENTS.

THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE DRAINING DOWN AND RE-FILLING OF ALL SYSTEMS NECESSARY TO COMPLETE THE WORK OUTLINED BY THIS PROJECT. THIS INCLUDES PROVIDING THE REQUIRED CHEMICAL TREATMENT WHEN RE-FILLING THE SYSTEM.



**HFS**Architects

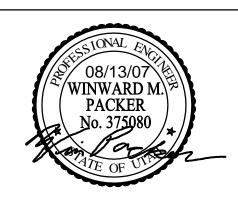
INTERIORS
PLANNING

**A**RCHITECTURE

1484 South State Street Salt Lake City, Utah 84115 801-596-0691/F: 596-0693 www.hfsa.com

CONSULTANT





# TESTING & ASSESSMENT CENTER REMODEL

Salt Lake Community College Redwood Campus Salt Lake City, Utah

DESCRIPTION

| DATE:              | 14 AUGUST 2007 |
|--------------------|----------------|
| AGENCY PROJECT NO: | 07033660       |
| HFSA PROJECT NO:   | 0719.01        |
| CAD DIA/C EILE NO. |                |

CAD DWG FILE NO:

DRAWN BY: Staff

CHECKED BY: WP

DESIGNED BY: PC

DWG TYPE: MECHANICAL

ARCHITECTURAL PHASE:

CONSTRUCTION DOCUMENTS

SHEET TITLE

MARK DATE

MECHANICAL
GENERAL NOTES
AND LEGEND

M00<sup>2</sup>

SHEET 2 OF 6

3

4

SYMBOL ABR.

 $\multimap$ 

 $-\mathsf{CD}-$ 

−CF---

− MU —

DESCRIPTION

EXISTING PIPING TO BE REMOVED

EXISTING PIPING TO REMAIN

WET SIDE CONT

PITCH DOWN

ELBOW DOWN

TEE DOWN

**NEW PIPING** 

PIPE CAP OR PLUG

EXPANSION JOINT

ANCHOR POINT

CONCENTRIC REDUCER

ECCENTRIC REDUCER

FLEXIBLE CONNECTION

CONDENSATE DRAIN

NATURAL GAS PIPING

CHEMICAL FEED LINE

CW | CULINARY COLD WATER

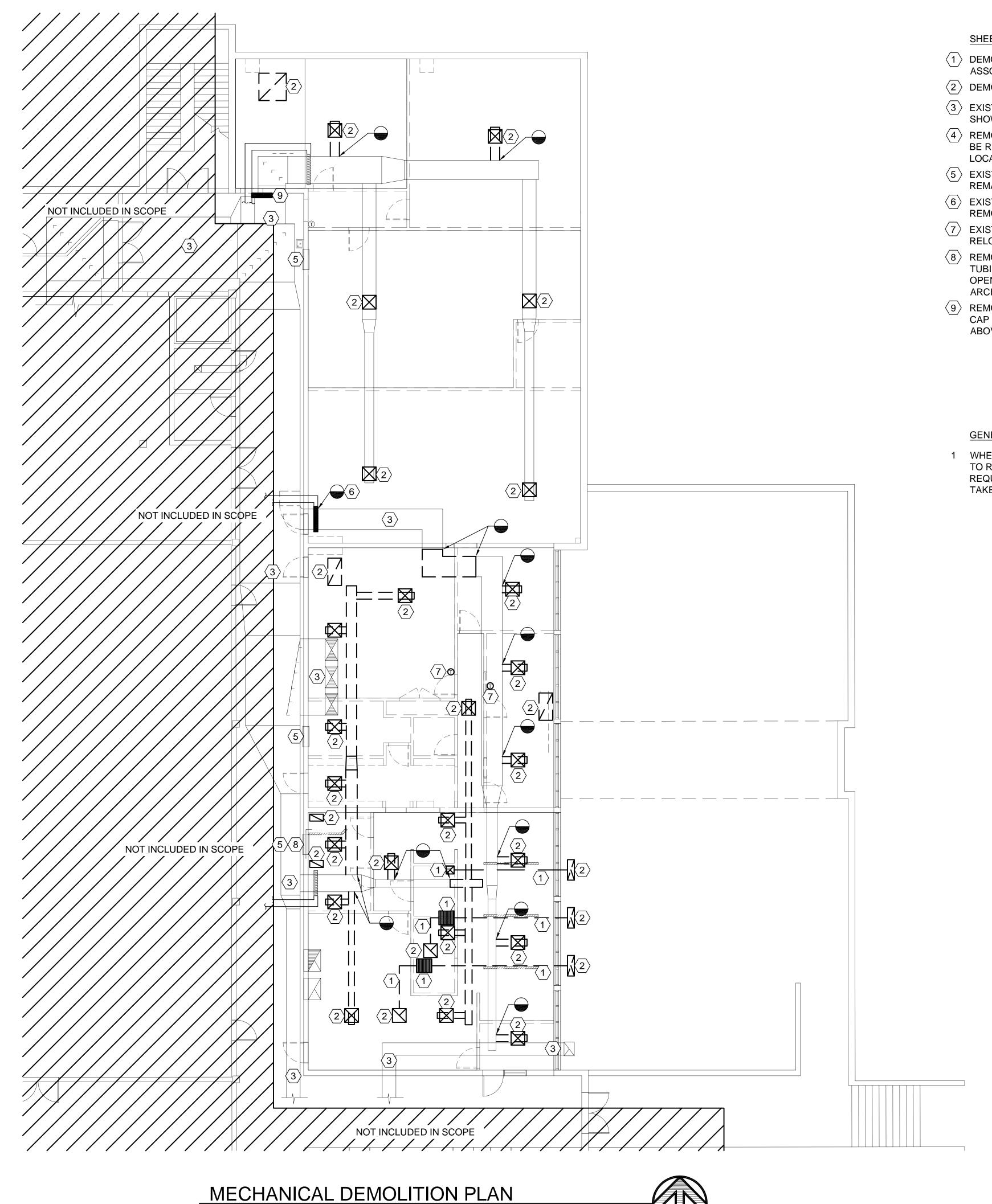
| HW | CULINARY HOT WATER

MAKE-UP WATER LINE

RECIRCULATED CULINARY HOT WATER

ELBOW UP

TEE UP

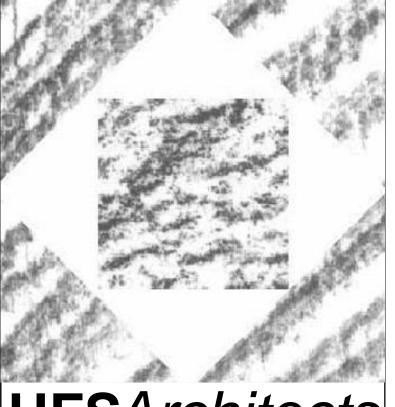


SHEET NOTES:

- $\langle 1 \rangle$  DEMO EXISTING EXHAUST FAN AND ASSOCIATED DUCTWORK.
- $\langle 2 \rangle$  DEMO EXISTING GRILLE.
- (3) EXISTING DUCTWORK TO REMAIN AS SHOWN.
- $\overline{\langle 4 \rangle}$  REMOVE EXISTING THERMOSTAT. TO BE RELOCATED, SEE ME101 FOR NEW LOCATION.
- (5) EXISTING TRANSFER TO HALL TO REMAIN.
- $\langle 6 \rangle$  EXISTING RE-HEAT COIL TO BE REMOVED. SEE SHEET ME101.
- $\overline{\langle 7 \rangle}$  EXISTING THERMOSTAT TO BE RELOCATED. SEE SHEET ME101.
- $\langle 8 \rangle$  REMOVE ANY OBSTRUCTIONS (WIRES, TUBING, ETC.) FROM DAMPER OPENING. COORDINATE WITH ARCHITECT.
- $\langle 9 \rangle$  REMOVE EXISTING CABINET HEATER. CAP EXISTING HWS / HWR PIPING ABOVE CEILING.

#### **GENERAL NOTE:**

1 WHERE EXISTING DUCTWORK TRUNK IS TO REMAIN PATCH DUCTWORK AS REQUIRED AT ALL LOCATIONS THAT A TAKEOFF IS REMOVED.



# **HFS**Architects

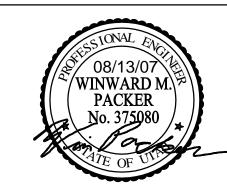
**A**RCHITECTURE

NTERIORS **P**LANNING

1484 South State Street Salt Lake City, Utah 84115 801-596-0691/F: 596-0693 www.hfsa.com

CONSULTANT





## **TESTING &** ASSESSMENT CENTER REMODEL

Salt Lake Community College Redwood Campus Salt Lake City, Utah

| MARK | DATE | DESCRIPTION |
|------|------|-------------|
|      |      |             |
|      |      |             |
|      |      |             |
|      |      |             |
|      |      |             |
|      |      |             |
|      |      |             |
|      |      |             |

| DATE:                    | 14 AUGUST 2007 |
|--------------------------|----------------|
| AGENCY PROJECT NO:       | 07033660       |
| HFSA PROJECT NO:         | 0719.01        |
| CAD DWG FILE NO:         |                |
| DRAWN BY:                | staff          |
| CHECKED BY:              | WP             |
| DESIGNED BY:             | PC             |
| DWG TYPE:                | MECHANICAL     |
| A D OLUTE OT LIDAL DUAGE |                |

ARCHITECTURAL PHASE:

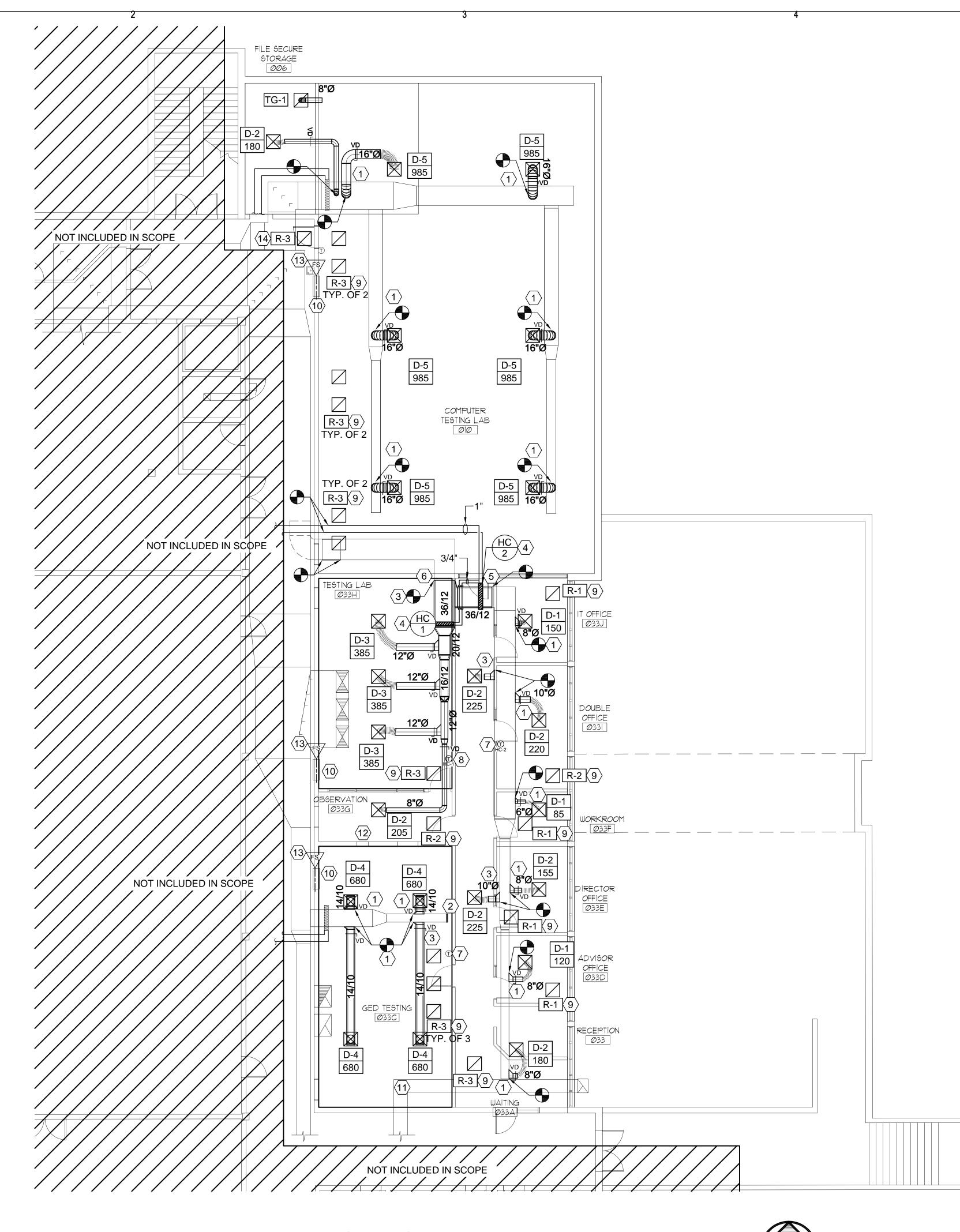
CONSTRUCTION DOCUMENTS

SHEET TITLE

**MECHANICAL** DEMOLITION PLAN

**MD101** 

3 OF 6 SHEET

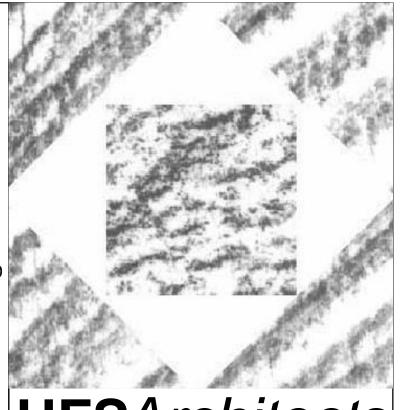


#### SHEET NOTES:

- 1 MODIFY EXISTING DUCT PENETRATION TO FIT NEW DUCT TAKEOFF.
- $\langle 2 \rangle$  CAP EXISTING DUCT PENETRATION.
- NEW DUCT PENETRATION IN EXISTING DUCT.
- PROVIDE NEW DUCT MOUNTED HOT WATER COIL SEE SCHEDULES AND DETAILS.
- 5 PROVIDE NEW PENETRATION FOR PIPING THROUGH EXISTING CMU WALL AT THIS APPROXIMATE LOCATION.
- 6 EXISTING DUCT THROUGH EXISTING WALL TO REMAIN.
- 7 RELOCATE EXISTING THERMOSTAT. CONFIRM EXACT LOCATION WITH OWNER.
- 8 PROVIDE NEW THERMOSTAT FOR HC-1 AT THIS LOCATION.
- 9 PROVIDE SOUND BOOT ON RETURN GRILLE.
- (10) EXISTING TRANSFER TO HALL TO REMAIN.
- (11) EXISTING EXHAUST DUCT TO REMAIN.
- (12) EXISTING 20/12 OPENING IN WALL TO REMAIN.
- PROVIDE FIRE / SMOKE DAMPER. FIELD VERIFY EXACT LOCATIONS AND SIZES. ENSURE NO OBSTRUCTIONS, (WIRES OR TUBING) PASS THROUGH THESE EXISTING OPENINGS.
- (14) PROVIDE NEW RETURN GRILLE IN HALL.

### GENERAL NOTE:

- 1 CFM VALUES ARE BASED ON ASBUILT INFORMATION OF CURRENT SYSTEMS.
- 2 COORDINATE DIFFUSER/GRILLE LOCATION WITH SPRINKLERS.
- 3 RE-LOCATE SPRINKLER HEADS, AND PROVIDE NEW SPRINKLER HEADS WHERE NECESSARY TO PROVIDE ADEQUATE COVERAGE OF REMODELED AREA. PROVIDE NEW HEADS TO MATCH EXISTING. PROVIDE SHOP DRAWINGS STAMPED BY NICET CERTIFIED DESIGNER.
- 4 PATCH EXISTING DUCTWORK AS REQUIRED.



# **HFS**Architects

ARCHITECTURE INTERIORS

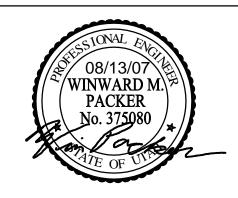
**P**LANNING

www.hfsa.com

1484 South State Street Salt Lake City, Utah 84115 801-596-0691/F: 596-0693

CONSULTANT





# TESTING & ASSESSMENT CENTER REMODEL

Salt Lake Community College Redwood Campus Salt Lake City, Utah

| MARK | DATE | DESCRIPTION |
|------|------|-------------|
|      |      |             |
|      |      |             |
|      |      |             |
|      |      |             |
|      |      |             |
|      |      |             |
|      |      |             |
|      |      |             |

| DATE:              | 14 AUGUST 2007 |
|--------------------|----------------|
| AGENCY PROJECT NO: | 07033660       |
| HFSA PROJECT NO:   | 0719.01        |
| CAD DWG FILE NO:   |                |
| DRAWN BY:          | staff          |
| CHECKED BY:        | WP             |
| DESIGNED BY:       | PC             |
| DWG TYPE:          | MECHANICAL     |
|                    |                |

ARCHITECTURAL PHASE:

CONSTRUCTION DOCUMENTS

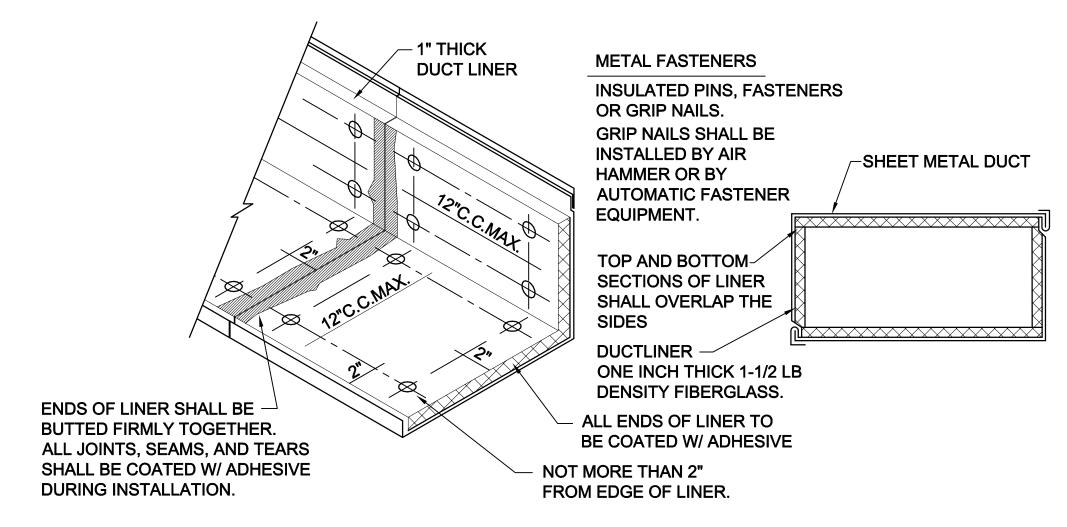
SHEET TITLE

MECHANICAL PLAN

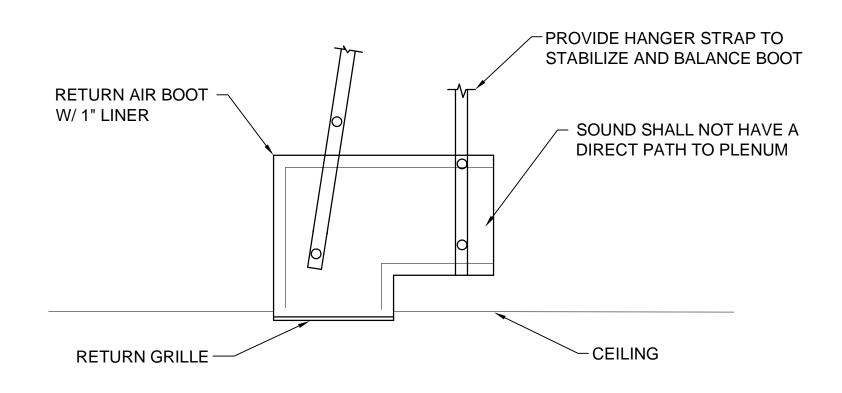
**ME101** 

SHEET 4 OF 6

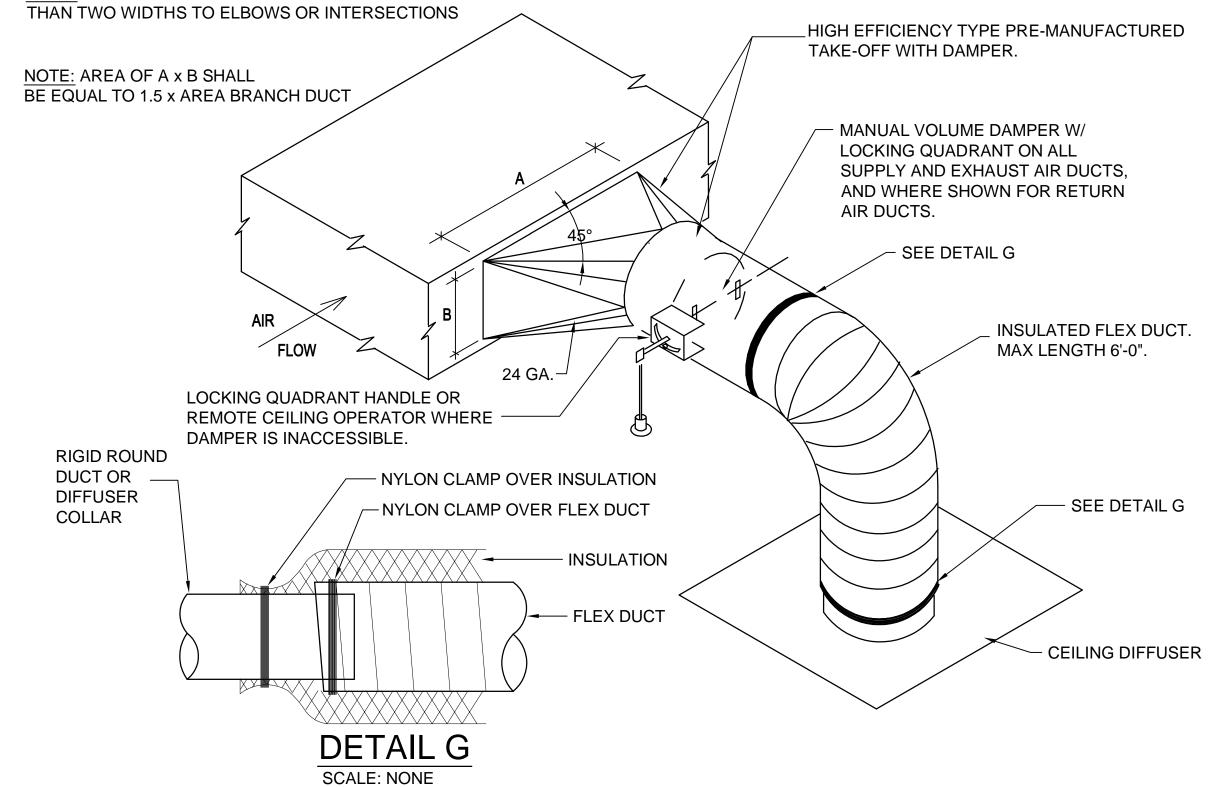
MECHANICAL PLAN



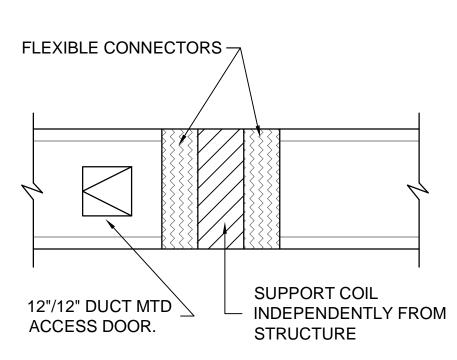
# **DUCT LINER DETAIL**



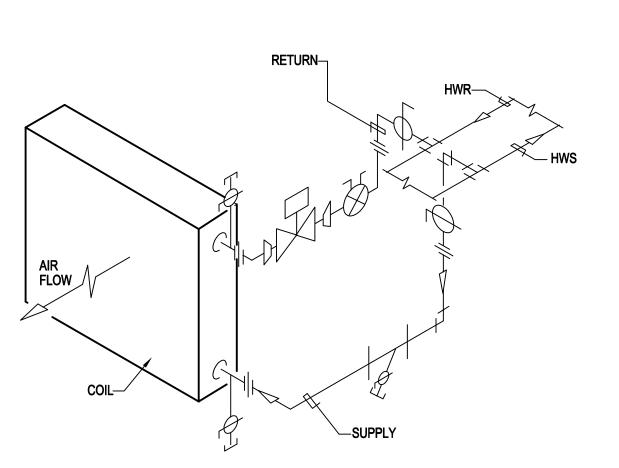
RETURN AIR BOOT DETAIL



SQUARE-TO-ROUND TAKE-OFF DETAIL SCALE: NONE

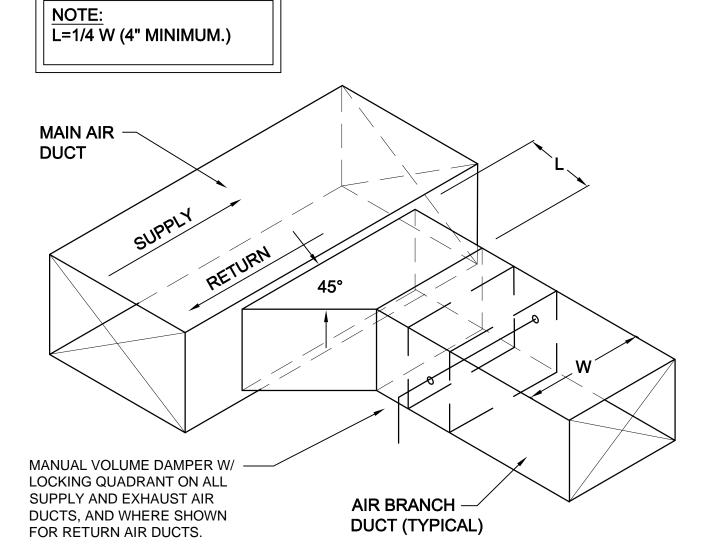


DUCT MOUNTED COIL DETAIL SCALE: NONE

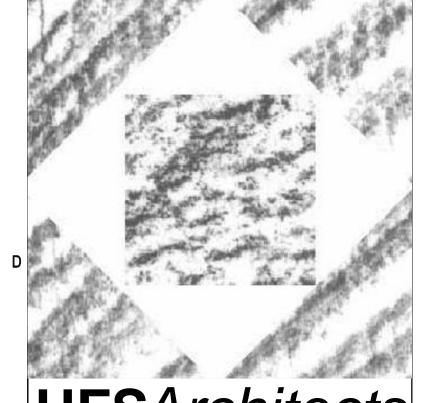


NOTE: TAKE-OFFS SHOULD NOT BE INSTALLED CLOSER

HOT WATER COIL PIPING SCHEME SCALE: NONE



BRANCH DUCT TAKE-OFF & DAMPER DETAIL SCALE: NONE



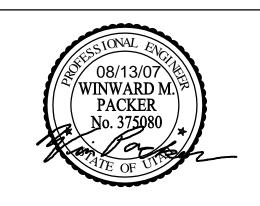
## **HFS**Architects

**I**NTERIORS **P**LANNING

1484 South State Street Salt Lake City, Utah 84115 801-596-0691/F: 596-0693 www.hfsa.com

CONSULTANT





## **TESTING &** ASSESSMENT CENTER REMODEL

Salt Lake Community College Redwood Campus Salt Lake City, Utah

| MARK | DATE | DESCRIPTION |
|------|------|-------------|
|      |      |             |
|      |      |             |
|      |      |             |
|      |      |             |
|      |      |             |
|      |      |             |
|      |      |             |
|      |      |             |
|      |      |             |

| l a a              |                |
|--------------------|----------------|
| DWG TYPE:          | MECHANICAL     |
| DESIGNED BY:       | PC             |
| CHECKED BY:        | WP             |
| DRAWN BY:          | staff          |
| CAD DWG FILE NO:   |                |
| HFSA PROJECT NO:   | 0719.01        |
| AGENCY PROJECT NO: | 07033660       |
| DATE:              | 14 AUGUST 2007 |

ARCHITECTURAL PHASE: **CONSTRUCTION DOCUMENTS** 

SHEET TITLE

**MECHANICAL DETAILS** 

**ME501** 

5 OF 6 SHEET

| HOT WATER COIL SCHEDULE |                    |      |                          |       |        |                            |                 |                   |
|-------------------------|--------------------|------|--------------------------|-------|--------|----------------------------|-----------------|-------------------|
| SYMBOL                  | LOCATION           | CFM  | AIR<br>PRESS. IN<br>W.G. | BTU   | G.P.M. | PRESS.<br>DROP FT.<br>HEAD | MAKE &<br>MODEL | SCHEDULE<br>NOTES |
| HC 1                    | TESTING<br>LAB 103 | 1360 | .15                      | 50000 | 5      | 5                          | TRANE           | 1,2,3,4,5         |
| HC 2                    | TESTING<br>LAB 103 | 1360 | .15                      | 50000 | 5      | 5                          | TRANE           | 1,2,3,4,5         |

- 1. COIL SIZE SHALL BE APPROXIMATELY 36/12. FIELD VERIFY BEFORE ORDERING.
- 2. SIZE FOR 180° EWT AND 160° LWT.
- 3. SIZE FOR 55° EAT AND 95° LAT.
- 4. SEE SPECIFICATIONS FOR APPROVED MANUFACTURER'S

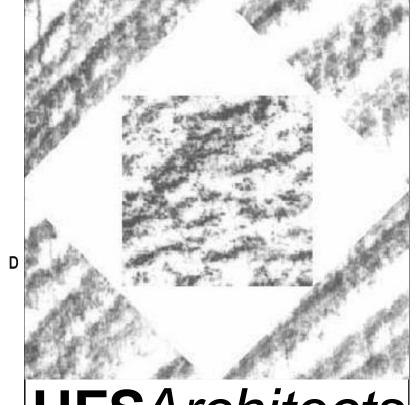
| DIFFUSER SCHEDULE |         |         |           |          |                 |      |            |                   |
|-------------------|---------|---------|-----------|----------|-----------------|------|------------|-------------------|
| SYMBOL            | TYPE    | MAX CFM | FACE SIZE | NCK SIZE | CEILING<br>TYPE | BLOW | PATTERN    | SCHEDULE<br>NOTES |
| D-1<br>CFM        | CEILING | 150     | 6X6       | 6"Ø      | LAY-IN          | 4WAY |            | 1,2,3,4           |
| D-2<br>CFM        | CEILING | 300     | 9X9       | 8"Ø      | LAY-IN          | 4WAY | <b>₫</b> ₩ | 1,2,3,4           |
| D-3<br>CFM        | CEILING | 500     | 12X12     | 10"Ø     | LAY-IN          | 4WAY | <b>₫</b> ₩ | 1,2,3,4           |
| D-4<br>CFM        | CEILING | 750     | 15X15     | 14"Ø     | LAY-IN          | 4WAY | 4 N        | 1,2,3,4           |
| D-5<br>CFM        | CEILING | 1000    | 18X18     | 16"Ø     | LAY-IN          | 4WAY | 4 N        | 1,2,3,4           |

- 1. PROVIDE LAY-IN CEILING AND BORDER / MODULE AS REQUIRED. SEE ARCHITECTURAL CEILING PLANS.
- 2. MAXIMUM NC 25 AT CFM LISTED.
- 3. PROVIDE TRANSITION TO DIFFUSER NECK SIZE AS REQUIRED TO DUCT WORK SHOWN ON PLAN.
- 4. DIFFUSER SHALL BE PRICE MODEL SMD OR EQUAL BY APPROVED MANUFACTURER IN SPECIFICATIONS.

| REGISTER, LOUVER & GRILLE SCHEDULE |         |          |         |                 |                |                 |                   |
|------------------------------------|---------|----------|---------|-----------------|----------------|-----------------|-------------------|
| SYMBOL                             | TYPE    | SERVICE  | MAX CFM | NOMINAL<br>SIZE | THROAT<br>SIZE | CEILING<br>TYPE | SCHEDULE<br>NOTES |
| R-1                                | CEILING | RETURN   | 180     | 8/8             | 8/8            | LAY-IN          | 1,2,3,4           |
| R-2                                | CEILING | RETURN   | 250     | 10/10           | 10/10          | LAY-IN          | 1,2,3,4           |
| R-3                                | CEILING | RETURN   | 1200    | 22/22           | 22/22          | LAY-IN          | 1,2,3,4           |
| R-4                                | CEILING | RETURN   | 1200    | 22/22           | 22/22          | LAY-IN          | 1,2,3,5           |
| TG-1                               | CEILING | TRANSFER | 180     | 8/8             | 8/8            | LAY-IN          | 1,2,3,4           |

REGISTER. LOUVER AND DIFFUSER SCHEDULE NOTES:

- 1. MAXIMUM NC = 25 @ MAXIMUM CFM NOTED.
- 2. SHALL BE PRICE 535 OR EQUAL BY OTHER APPROVED MANUFACTURERS.
- 3. SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.
- 4. FINISH SHALL BE STANDARD WHITE.
- 5. FINISH TO BE SPECIFIED BY ARCH



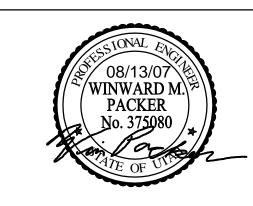
## **HFS**Architects

INTERIORS **P**LANNING

1484 South State Street Salt Lake City, Utah 84115 801-596-0691/F: 596-0693 www.hfsa.com

CONSULTANT





## **TESTING &** ASSESSMENT CENTER REMODEL

Salt Lake Community College Redwood Campus Salt Lake City, Utah

| MARK  | DATE | DESCRIPTION    |
|-------|------|----------------|
|       |      |                |
|       |      |                |
|       |      |                |
|       |      |                |
|       |      |                |
|       |      |                |
|       |      |                |
|       |      |                |
| DATE: |      | 14 AUGUST 2007 |

| AGENCY PROJECT NO:          | 07033660   |
|-----------------------------|------------|
| HFSA PROJECT NO:            | 0719.01    |
| CAD DWG FILE NO:            |            |
| DRAWN BY:                   | staff      |
| CHECKED BY:                 | WP         |
| DESIGNED BY:                | PC         |
| DWG TYPE:                   | MECHANICAL |
| A D OLUTE OT LID ALL DUA OF |            |

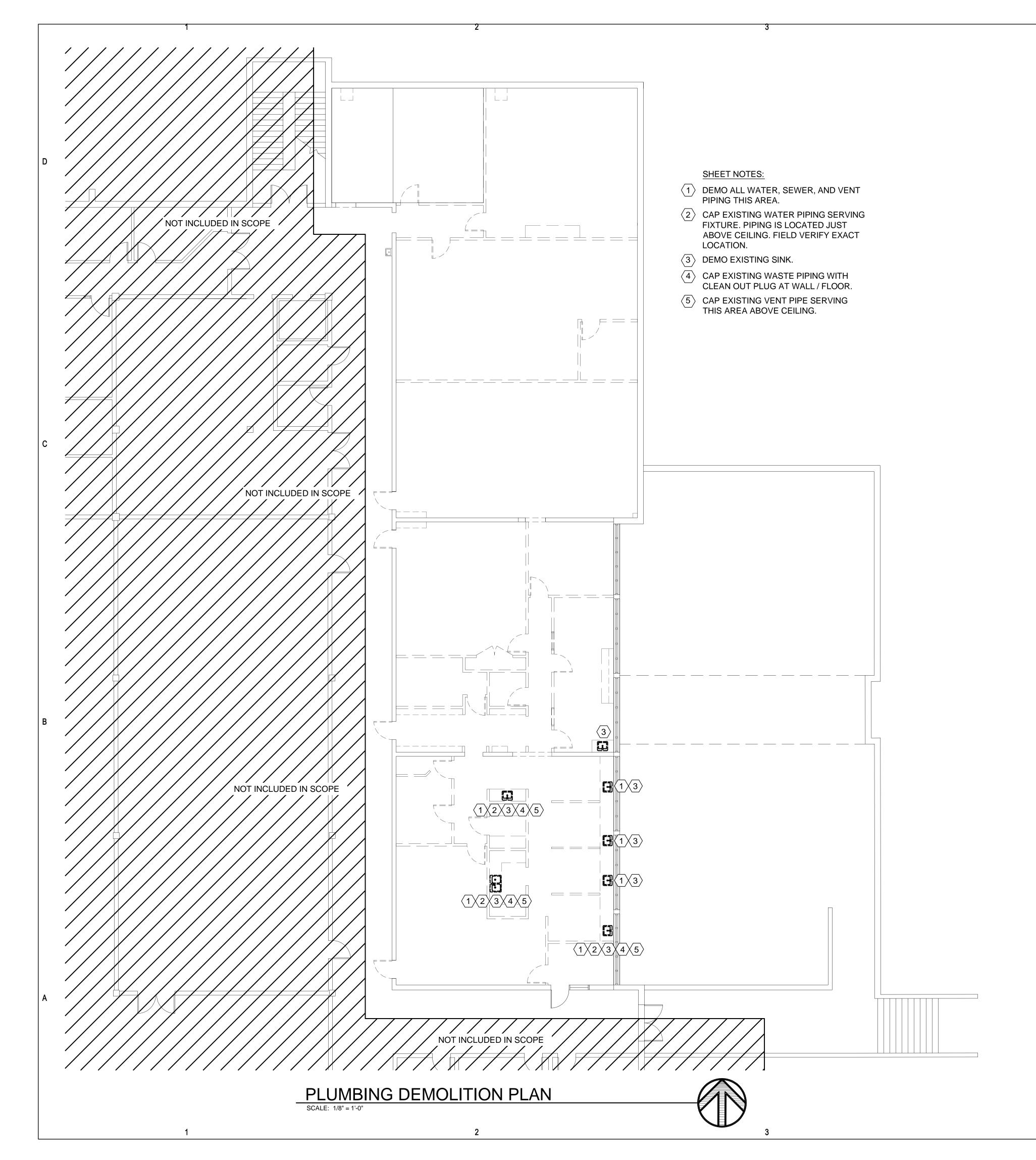
ARCHITECTURAL PHASE:
CONSTRUCTION DOCUMENTS

SHEET TITLE

**MECHANICAL** SCHEDULES

**ME601** 

SHEET



| PLUMBING LEGEND               |                           |                   |                           |  |  |  |  |  |  |  |  |  |
|-------------------------------|---------------------------|-------------------|---------------------------|--|--|--|--|--|--|--|--|--|
| MEANING                       | SYMBOL OR<br>ABBREVIATION | MEANING           | SYMBOL OR<br>ABBREVIATION |  |  |  |  |  |  |  |  |  |
| HOT WATER LINE                |                           | WALL CLEANOUT     | wco                       |  |  |  |  |  |  |  |  |  |
| COLD WATER LINE               |                           | CLEANOUT          | СО                        |  |  |  |  |  |  |  |  |  |
| VENT LINE                     |                           | CLEANOUT TO GRADE | сотб                      |  |  |  |  |  |  |  |  |  |
| WASTE LINE                    |                           | FLOOR CLEANOUT    | FCO                       |  |  |  |  |  |  |  |  |  |
| GAS LINE                      | G                         | BALL VALVE        | Φ                         |  |  |  |  |  |  |  |  |  |
| VENT THRU ROOF                | VTR                       | UNION             | ——                        |  |  |  |  |  |  |  |  |  |
| CONNECTION TO EXISTING PIPING | •                         |                   |                           |  |  |  |  |  |  |  |  |  |

#### PLUMBING GENERAL NOTES

| G-1 | ALL PLUMBING SHALL BE INSTALLED AND CONFORM TO THE 2006    |
|-----|--|
|     | EDITION OF THE INTERNATIONAL PLUMBING CODE (IPC) WITH UTAH |
|     | ANNOTATIONS AND LOCAL AUTHORITY REQUIREMENTS.              |

ALL PIPING MATERIALS SHALL MEET ALL REQUIREMENTS OF IPC AND LOCAL AUTHORITY. PLASTIC PIPING SHALL BE ALLOWED ONLY WHERE ALLOWED BY CODE. PLASTIC PIPING SHALL NOT BE ROUTED THROUGH RETURN AIR PLENUMS OR OTHER AREAS PROHIBITED BY THE IMC, IPC OR NFPA CODES OR BY LOCAL AUTHORITY

GAS PIPING INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH GAS COMPANY REGULATIONS, NFPA CODE REQUIREMENTS, AND LOCAL AUTHORITY.

ALL MATERIALS SHALL BE NEW AND SHALL BE DOMESTIC MADE UNLESS SPECIFICALLY APPROVED OTHERWISE IN WRITING BY ARCHITECT OR OWNER.

PROVIDE VACUUM BREAKERS AND BACK FLOW PREVENTERS WHERE REQUIRED BY CODE OR WHERE THERE MAY BE ANY POSSIBLE CHANCE FOR CROSS CONTAMINATION. PREVENTERS SHALL BE INSTALLED IN ACCORDANCE WITH UTAH CODE.

ALL PLUMBING INFORMATION IS NOT LIMITED TO THE PLUMBING DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR INFORMATION ON ALL OTHER CONSTRUCTION DOCUMENTS INCLUDING ARCHITECTURAL DRAWING, STRUCTURAL DRAWINGS, MECHANICAL DRAWINGS, AND ELECTRICAL DRAWINGS.

THE WORKING DRAWINGS ARE DIAGRAMMATIC. BECAUSE OF THE SMALL SCALE OF THE DRAWING, THEY DO NOT SHOW EVERY OFFSET, BEND OR ELBOW NECESSARY FOR THE COMPLETE INSTALLATION IN THE SPACE PROVIDED. ALL PIPING SHALL BE CHECKED AND COORDINATED WITH THE ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS.

COORDINATE ALL PIPING AND PLUMBING EQUIPMENT WITH ALL OTHER TRADES AND/OR CONTRACTORS PRIOR TO INSTALLATION.

ANY AND ALL ALTERATIONS TO THE SYSTEM SHOWN SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR AND ARCHITECT/ENGINEER SHALL BE NOTIFIED IN WRITING PRIOR TO CHANGES.

GAS LINE FITTINGS SHALL BE STANDARD WELD FITTINGS WITH TAPERED REDUCERS. DO NOT USE VALVES, UNIONS, OR AUTO CONTROLS IN GAS LINES ROUTED IN INACCESSIBLE CONCEALED SPACES.

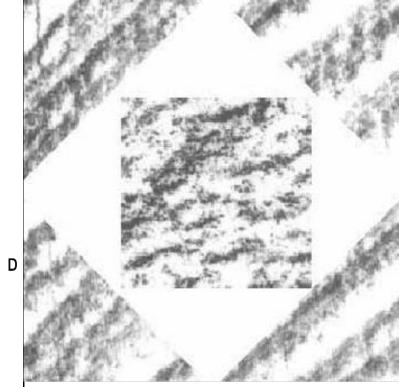
ALL WATER SYSTEMS SHALL MEET THE REQUIREMENTS OF ANSI/NSF STANDARD 61 SECTION 9 (1998), CONCERNING METAL CONTAMINANTS IN THE WATER SYSTEM.

WATER PIPING SHALL NOT BE ROUTED IN OUTSIDE WALLS OR ON EXTERIOR SIDE OF BUILDING INSULATION ENVELOPE.

WATER HAMMER ARRESTORS SHALL BE INSTALLED IN ALL WATER LINES WITH QUICK OPEN OR QUICK CLOSE VALVES.

WATER HAMMER ARRESTOR SCHEDULE:

TYPE A 1-11 FIXTURE UNITS TYPE B 12-32 FIXTURE UNITS TYPE C 33-60 FIXTURE UNITS TYPE D 61-113 FIXTURE UNITS



## **HFS**Architects

**A**RCHITECTURE **I**NTERIORS **P**LANNING

1484 South State Street Salt Lake City, Utah 84115 801-596-0691/F: 596-0693 www.hfsa.com

CONSULTANT



**WHW** ENGINEERING INC. OFESSIONAL MECHANICAL ENGINEERING 1354 East 3300 South Suite 200 SALT LAKE CITY, UTAH 84106 (801)466-4021, FAX 466-8536

/WINWARD M.\ PACKER

### **TESTING &** ASSESSMENT CENTER REMODEL

Salt Lake Community College Redwood Campus Salt Lake City, Utah

DESCRIPTION 14 AUGUST 2007 DATE: **AGENCY PROJECT NO:** 07033660 HFSA PROJECT NO: 0719.01 CAD DWG FILE NO: DRAWN BY: CHECKED BY: **DESIGNED BY:** DWG TYPE: **MECHANICAL** ARCHITECTURAL PHASE:

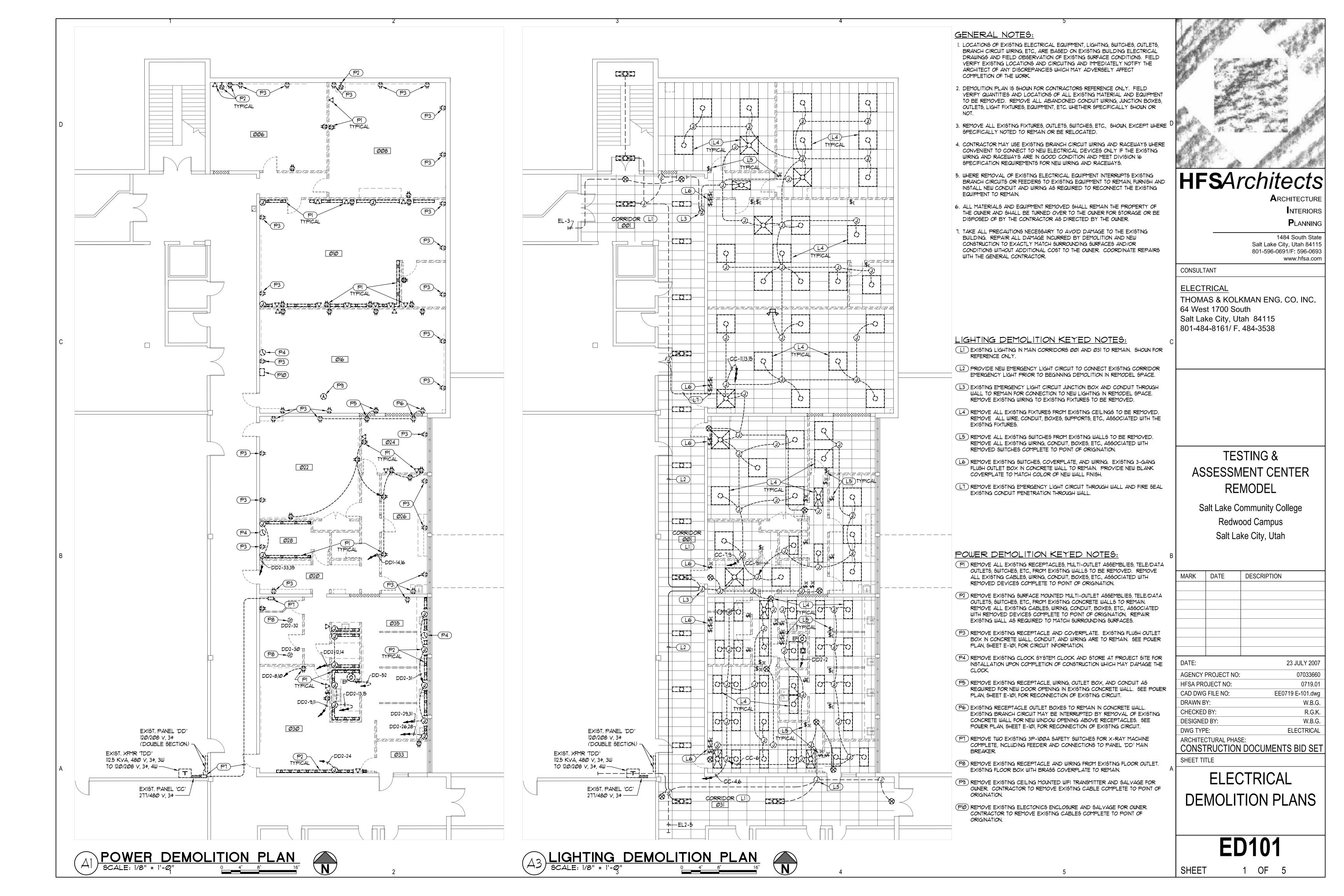
CONSTRUCTION DOCUMENTS

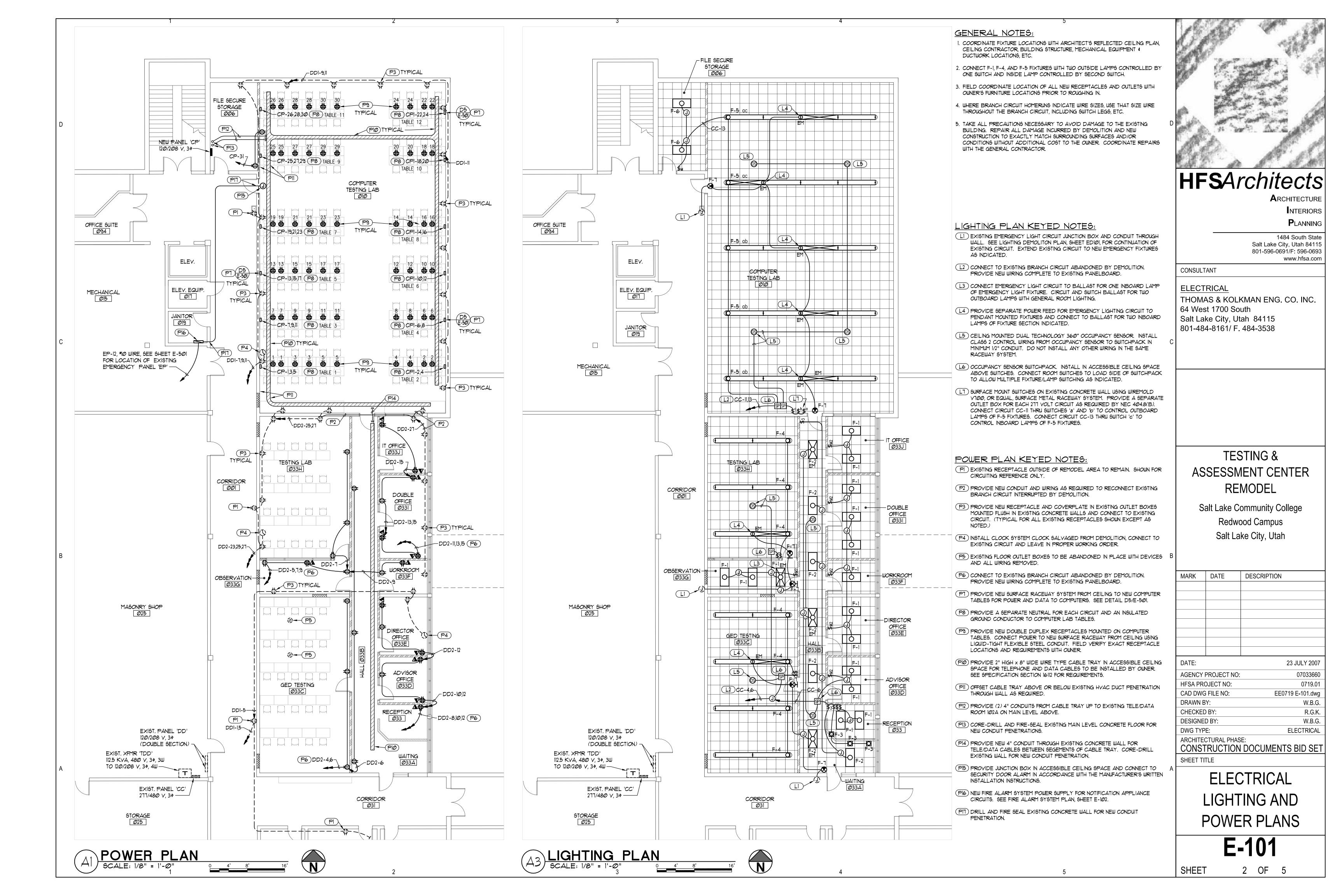
SHEET TITLE

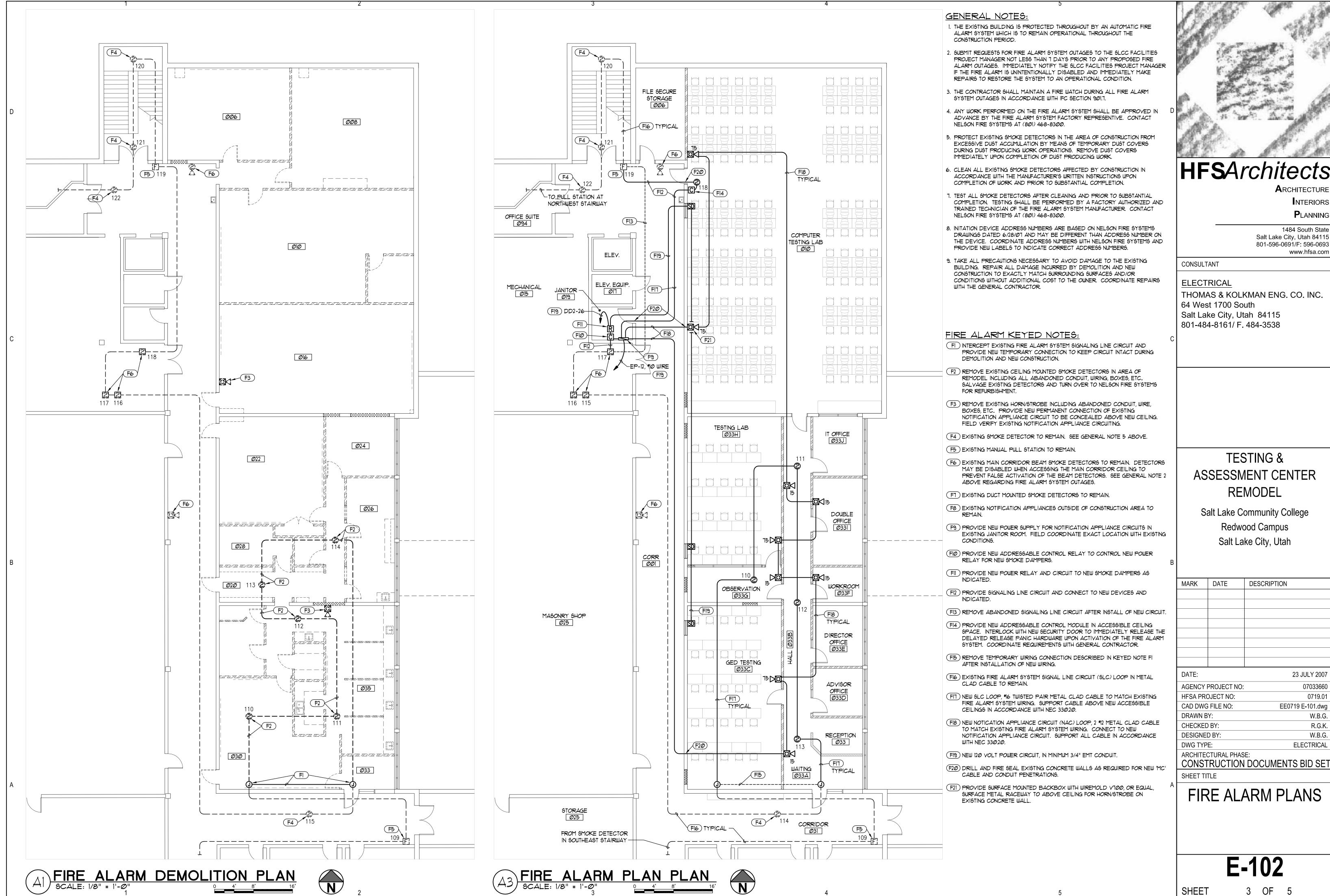
PLUMBING **DEMOLITION** PLAN

**PD101** 

SHEET OF 6



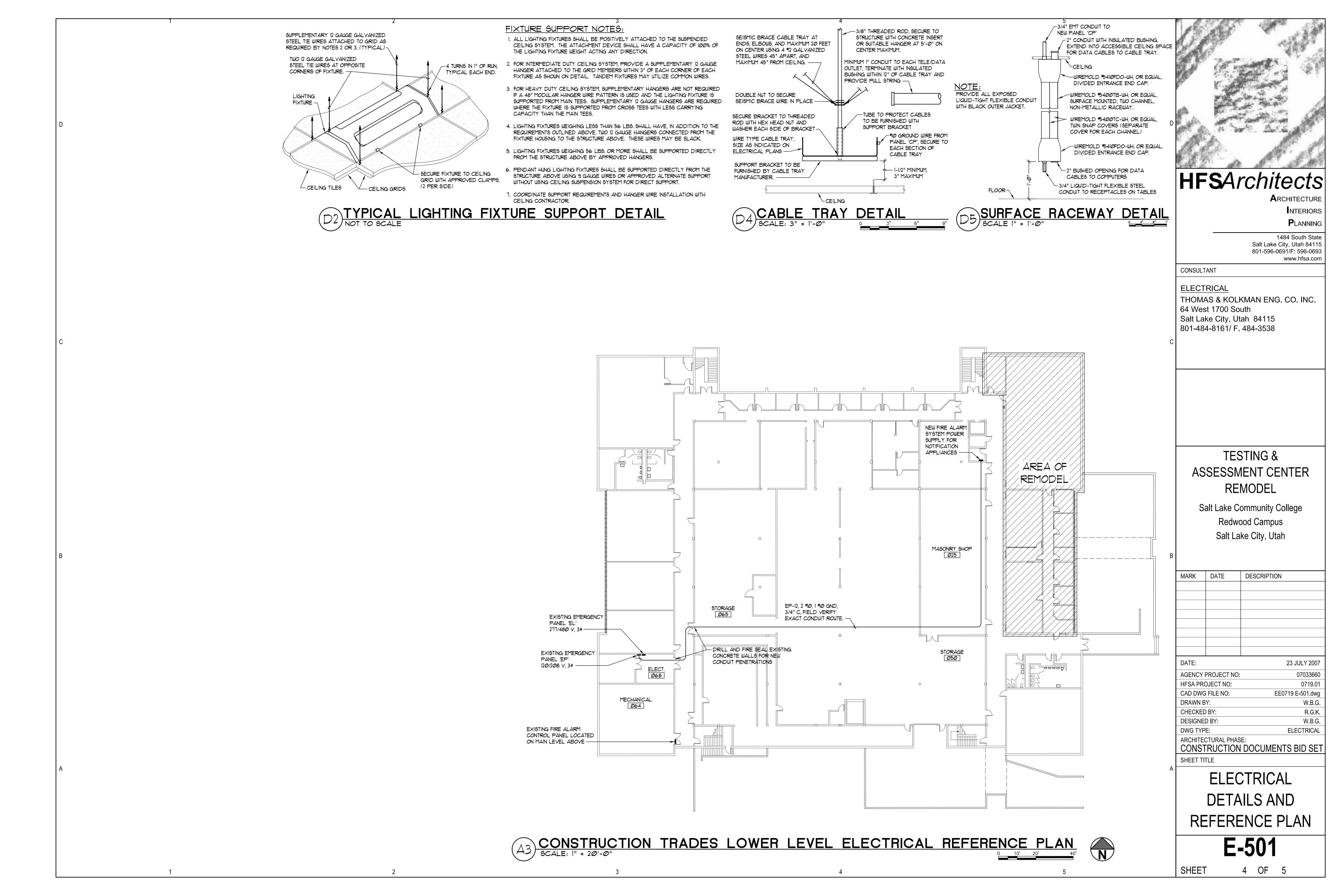




INTERIORS **P**LANNING

Salt Lake City, Utah 84115 801-596-0691/F: 596-0693 www.hfsa.com

23 JULY 2007 07033660 0719.01 EE0719 E-101.dwg W.B.G R.G.K W.B.G ELECTRICAL



|     | EX                                 | NITZI | G PANEL 'DD1'             |      |       |           | DOUBLE PANEL - SECTION I |            |          |        |     |   | 10,000 A. I. C. FULLY RATED   |     |         |     |  |
|-----|------------------------------------|-------|---------------------------|------|-------|-----------|--------------------------|------------|----------|--------|-----|---|-------------------------------|-----|---------|-----|--|
|     | GE                                 | NERAL | ELECTRIC TYPE 'NLAB', TYP | E '1 | ΓHQΒ′ | BREAKERS  | 2                        |            |          |        |     |   | 120/208 VOLT, 3 PHASE, 4 WIRE |     |         |     |  |
|     | 3                                  | POLE  | 300 AMP MAIN BREAKER      |      |       |           |                          |            |          |        |     |   | SURFACE                       | MDL | JNTED   |     |  |
| CIR | _                                  | RKR   | DESCRIPTION               | N□.  | 1     |           | PHA                      | ASE LOAD - | VA       |        | ND. |   | DESCRIPTION                   | В   | RKR     | CIR |  |
| N□. | Р                                  | AMPS  | DESCRIPTION               | LTS  | REC   | LOAD      | PHASE A                  | PHASE B    | PHASE C  |        |     | LTS                                     |                               | Р   | AMPS    | N□. |  |
| 1   | 1                                  | 20    | *                         |      | 4     | 720       | 1, 800                   |            |          | 1,080  | 6   |   | □UTLETS, 032,036 *            | 1   | 20      | 2   |  |
| 3   |                                    |       | DUTLETS 025 *             |      | 4     | 720       |                          | 1,800      |          | 1,080  | 6   |   | □UTLETS 040 *                 | Ш   | $\perp$ | 4   |  |
| 5   |                                    |       | DUTLETS HALL *            |      | 5     | 900       |                          |            | 1,800    | 900    | 5   |   | □UTLETS 040 *                 | Ш   |         | 6   |  |
| 7   |                                    |       | DUTLETS *                 |      | 6     | 1,080     | 2, 160                   |            |          | 1,080  | 6   |   | *                             |     |         | 8   |  |
| 9   |                                    |       | DUTLETS *                 |      | 6     | 1,080     |                          | 1, 980     |          | 900    | 5   |   | HEATERS HALL *                | Ш   |         | 10  |  |
| 11  |                                    |       | DUTLETS *                 |      | 4     | 720       |                          |            | 1,620    | 900    | 5   |   | HEATER ENTRANCE HALL *        | Ш   |         | 12  |  |
| 13  |                                    |       | DUTLETS 025 *             |      | 2     | 360       | 360                      |            |          |        |     |   | SPARE +                       |     |         | 14  |  |
| 15  | 1                                  | 20    | DUTLETS 025, EXIT SIGNS * |      | 1     | 180       |                          | 180        |          |        |     |   | SPARE +                       | 1   | 20      | 16  |  |
| 17  | 2                                  | 50    | 50A DUTLET BRICK LAB 025  |      | 1     | 4, 200    |                          |            | 8, 400   | 4, 200 |     |   | 50A DUTLET BRICK LAB 025      | 2   | 50      | 18  |  |
| 19  | -                                  | ı     | _                         |      |       | 4, 200    | 8, 400                   |            |          | 4, 200 |     |   | _                             | -   | -       | 20  |  |
| 21  | 2                                  | 50    | 50A DUTLET BRICK LAB 025  |      | 1     | 4, 200    |                          | 8, 400     |          | 4, 200 |     |   | 50A DUTLET BRICK LAB 025      | 2   | 50      | 22  |  |
| 23  | _                                  | ı     | _                         |      |       | 4, 200    |                          |            | 8, 400   | 4, 200 |     |   | -                             | -   | -       | 24  |  |
|     |                                    |       |                           |      |       |           | 12, 720                  | 12, 360    | 20, 220  | 0      |     |   |                               |     |         |     |  |
|     |                                    |       | TOTAL                     |      | NNEC  | TED LOAD: | 45,300 VA 126 AMPS FE    |            |          |        |     | FEEDER: EXISTING 4 #350, 1 #4 GND, 3" C |                               |     |         |     |  |
|     | CALCULATED FEEDER DEMAND, NEC 220: |       |                           |      |       |           |                          | VA         | 123 AMPS |        |     |   |                               |     |         |     |  |

NOTES - EXISTING PANEL 'DD1'

- \* EXISTING CIRCUIT TO REMAIN. FIELD VERIFY LOCATION AND INCLUDE ON NEW TYPEWRITTEN CIRCUIT INDEX.
- + EXISTING CIRCUIT ABANDONED BY DEMOLITION. CONNECT TO NEW CIRCUITS WHERE INDICATED. EXISTING PANEL 'DD' SCHEDULE SHOWN FOR REFERENCE ONLY. FIELD VERIFY ALL CIRCUITS AND LOADS.

|     | EX | NIT2I | IG PANEL 'DD2'              |                  |          |           | DOUBLE (            | PANEL - SEC         | CTION II |         |   |     | 10,000 A. I. C. FULL     |     |       |       |
|-----|----|-------|-----------------------------|------------------|----------|-----------|---------------------|---------------------|----------|---------|---|-----|--------------------------|-----|-------|-------|
|     | GE | NERAL | . ELECTRIC TYPE 'NLAB', TYF | PE /1            | ΓHQΒ′    | BREAKERS  | 3                   |                     |          |         |   |     | 120/208 VOLT, 3 PHASE,   | 4   | WIRE  | Ξ     |
|     | 3  | POLE  | 400 MAIN LUGS               |                  |          |           |                     |                     |          |         |   |     | SURFACE                  | MOL | JNTEJ | D     |
| CIR | E  | 3RKR  | DESCRIPTION                 | N□.              | N□.      | CIRCUIT   | PH                  | ASE LOAD -          | VA       | CIRCUIT | ND.                                     |     | DESCRIPTION              | В   | RKR   | CIR   |
| N□. | գ_ | AMPS  | DESCRIFITUN                 | LTS              | REC      | LOAD      | PHASE A             | PHASE B             | PHASE C  | LOAD    | REC                                     | LTS | DESCRIPTION              | Р   | AMPS  | S NO. |
| 1   | 2  | 40    | □UTLET, MIXER 025 *         |                  |          | 1, 945    | 2, 485              |                     |          | 540     | 3                                       |     | DUTLETS-GED TESTING+     | 1   | 20    | 2     |
| 3   | 1  | -     | _                           |                  |          | 1, 945    |                     | 2, 485              |          | 540     | 3                                       |     | DUTLETS-TESTING HALL+    |     |       | 4     |
| 5   | 1  | 20    | OUTLETS-OBSERVATION +       |                  | 4        | 720       |                     |                     | 720      |         |   |     | SPARE+                   |     |       | 6     |
| 7   |    |       | OUTLETS-TEST LAB +          |                  | 3        | 540       | 900                 |                     |          | 360     | 2                                       |     | OUTLETS-RECEPTION +      |     |       | 8     |
| 9   |    |       | OUTLETS-WORK ROOM +         |                  | 3        | 540       |                     | 1,440               |          | 900     | 5                                       |     | OUTLETS-ADVISOR OFFICE+  |     |       | 10    |
| 11  |    |       | OUTLETS-DBLE OFFICE SO+     |                  | 4        | 720       |                     |                     | 1,620    | 900     | 5                                       |     | OUTLETS-DIRECTOR OFFICE+ |     |       | 12    |
| 13  |    |       | OUTLETS-DBLE OFFICE NO+     |                  | 3        | 540       | 540                 |                     |          |         |   |     | SPARE +                  |     |       | 14    |
| 15  | 1  | 20    | OUTLETS-IT OFFICE +         |                  | 4        | 720       |                     | 720                 |          |         |   |     | SPARE +                  |     |       | 16    |
| 17  | 3  | 30    | OUTLET, MASONRY SAW 025*    |                  |          | 1,275     |                     |                     | 1, 275   |         |   |     |                          |     |       | 18    |
| 19  | -  | _     | _                           |                  |          | 1,275     | 1, 275              |                     |          |         |   |     |                          |     |       | 20    |
| 21  | -  | -     | _                           |                  |          | 1,275     |                     | 2, 275              |          | 1,000   |   |     | OUTLETS ROOM 110 *       |     |       | 22    |
| 23  | 1  | 20    | DUTLETS RM 020 *            |                  |          | 1,000     |                     |                     | 1,000    |         |   |     | SPARE +                  |     |       | 24    |
| 25  |    |       | DUTLETS RM 020 *            |                  |          | 1,000     | 1, 240              |                     |          | 240     |   |     | SMOKE DAMPERS, MAIN CORR |     |       | 26    |
| 27  |    |       | DUTLETS RM 020 *            |                  |          | 1,000     |                     | 1,000               |          |         |   |     | SPARE +                  |     |       | 28    |
| 29  | 1  | 20    | SPARE +                     |                  |          |           |                     |                     | 0        |         |   |     | SPARE +                  |     |       | 30    |
| 31  | 3  | 100#  | PANEL 'CP' STOR. RM.        |                  |          | 7, 560    | 7, 560              |                     |          |         |   |     | SPARE +                  | 1   | 20    | 32    |
| 33  | -  | -     | _                           |                  |          | 7, 200    |                     | 7, 200              |          |         |   |     | VACUUM PUMP JANITOR 034  | 2   | 30    | 34    |
| 35  | -  | -     | _                           |                  |          | 7, 200    |                     |                     | 7, 200   |         |   |     | (REMOVED?)               | -   | -     | 36    |
|     |    |       |                             |                  | SE       | CTION II  | 14,000              | 15, 120             | 11,815   |         |   |     |                          |     |       |       |
|     |    |       |                             | SEC              | TION     | 11 & I 2I | 26, 720             | 27, 480             | 32, 035  |         |   |     |                          |     |       |       |
|     |    | TOTAL | _ CONNECTED LOADS:          |                  | S        | ECTION I: | 40, 935             | 40, 935 VA 114 AMPS |          |         | FEEDER: EXISTING 4 #350, 1 #4 GND, 3" C |     |                          |     |       |       |
|     |    |       |                             | SECTIONS I & II: |          |           | 86, 235             | 86, 235 VA 239 AMPS |          |         |   |     |                          |     |       |       |
|     |    |       | CALCULATED FEEDER           | AND,             | NEC 220: | 85, 155   | 85, 155 VA 236 AMPS |                     |          |         |   |     |                          |     |       |       |

NOTES - EXISTING PANEL 'DD2'

- \* EXISTING CIRCUIT TO REMAIN. FIELD VERIFY LOCATION AND INCLUDE ON NEW TYPEWRITTEN CIRCUIT INDEX. + EXISTING CIRCUIT ABANDONED BY DEMOLITION. CONNECT TO NEW CIRCUITS WHERE INDICATED.
- # PROVIDE NEW 3P-100A GENERAL ELECTRIC TYPE 'THQB' CIRCUIT BREAKER TO SERVE NEW PANEL 'CP', REPLACE EXISTING SPARE BREAKERS.

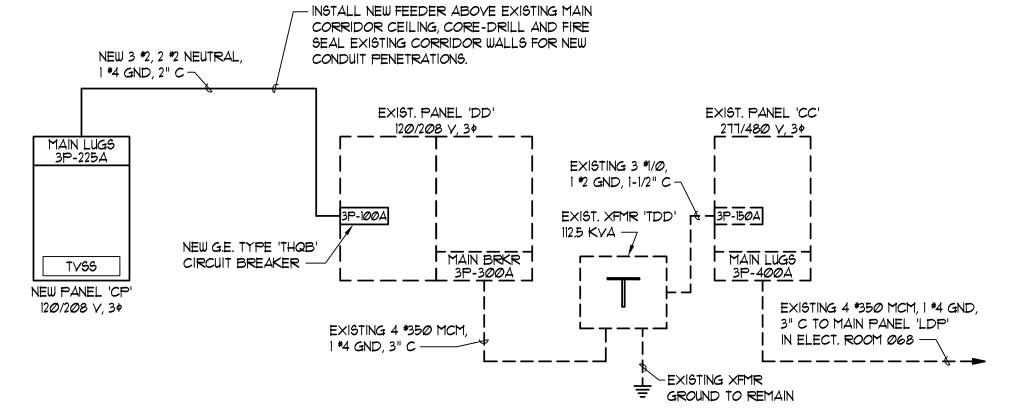
|       | - V 1       | ICTIN | IC DANIEL / CC/  |        |       |              |                 |         |          |         |            |      | 25,000 A. I. C. FULI      | V 1                 | DATE,    | ח  |
|-------|-------------|-------|--|--------|-------|--------------|-----------------|---------|----------|---------|------------|------|---------------------------|---------------------|----------|----|
|       |             |       | G PANEL 'CC'<br>. ELECTRIC TYPE 'NHB', TYF   | F / TL | JE D' | BDEVKED&     |                 |         |          |         |            |      | 277/480 VOLT, 3 PHASE,    |                     |          |    |
|       |             |       | 400 AMP MAIN LUGS  | _ ''   | ובט   | DICHICINS    |                 |         |          |         |            |      | SURFACE                   |                     |          |    |
|       |             | RKR   | 400 AMI MAIN LOGS  | NΠ     | МП    | CIDOUIT      | PHASE LOAD - VA |         |          | CIRCUIT | МП         | ΝП   |                           | _                   | RKR      |    |
| ND. F |             | AMPS  | DESCRIPTION  |        | REC   | CIRCUIT LOAD | PHASE A         | PHASE B | PHASE C  |         | NO.<br>REC |      | DESCRIPTION               | _                   | AMPS     |    |
| 1     | 1           |       | LIGHTS 030 *   | LIS    | INLU  | 800          | 2,600           | LUHOF D | FUHSE C  | 1,800   |            | L13  | NIGHT LIGHTS HALL *       | 1                   | 20       | 2  |
| 3     | 1           |       | LIGHTS 030 *   |        |       | 3,000        | L, 000          | 5, 725  |          | 2, 725  |            | 10   | LTS, TEST LABS+           | 1                   |          | 4  |
| 5     | H           |       | SPARE *  |        |       | 3,000        |                 | 3,723   | 1,515    |         |            |      | LTS, TEST OFFICE AREA+    | +                   | $\vdash$ | 6  |
| 7     | H           |       | SPARE +  |        |       |              | 3, 200          |         | 1,010    | 3, 200  |            | 17   | LIGHTS 040 *              | +                   | $\vdash$ | 8  |
| 9     |             |       | SPARE +  |        |       |              | 3, 200          | 3, 000  |          | 3,000   |            |      | LIGHTS HALL *             | +                   | $\vdash$ | 10 |
| 11    |             |       | LTS, COMPUTER TEST LAB+  | 5      |       | 2, 400       |                 | 3,000   | 4, 400   |         |            |      | LIGHTS 040 *              | +                   | $\vdash$ | 12 |
| 13    | H           |       | LTS, COMPUTER TEST LAB+  | 5      |       | 1,230        | 3, 730          |         | 1, 100   | 2,500   |            |      | LIGHTS BRICK LAB 025 *    | +                   |          | 14 |
| 15    | H           |       | SPARE +  | + -    |       | 1,200        | 0,700           | 2, 500  |          | 2,500   |            |      | LIGHTS BRICK LAB 025 *    | +                   |          | 16 |
| 17    |             |       | OF TIKE  |        |       |              |                 | 2, 303  | 2,500    | ·       |            |      | LIGHTS BRICK LAB 025 *    | $^{+}$              |          | 18 |
| 19    |             |       | FAN ROOM LIGHTS *  |        |       | 1,500        | 5, 050          |         |          | 3, 550  |            |      | LIGHTS STORAGE *          |                     |          | 20 |
| 21    | $\parallel$ |       | THE NAME OF THE PARTY OF THE PA |        |       | 0,000        | 2, 555          | 800     |          | 800     |            |      | NIGHT LIGHTS STORAGE *    | $^{\dagger\dagger}$ |          | 55 |
| 23    | 1           | 20    |  |        |       |              |                 |         | 3, 400   |         |            |      | LIGHTS STORAGE *          | 1                   | 20       | 24 |
|       | 3           |       | XMFR FOR PANEL 'DD'  |        |       | 26, 720      | 26, 720         |         |          | ,       |            |      | SPACE                     | 1                   |          | 26 |
| 27 -  | -           | _     | -  |        |       | 27, 480      | ,               | 27, 480 |          |         |            |      |                           | Ti                  |          | 28 |
| 29 -  | -           | -     | -  |        |       | 32, 035      |                 |         | 32, 035  |         |            |      |                           | Ħ                   |          | 30 |
| 31    | 1           |       | SPACE  |        |       |              | 0               |         | ·        |         |            |      |                           | Ш                   |          | 32 |
| 33    | П           |       | 1  |        |       |              |                 | 0       |          |         |            |      |                           |                     |          | 34 |
| 35    |             |       |  |        |       |              |                 |         | 0        |         |            |      |                           |                     |          | 36 |
| 37    | П           |       |  |        |       |              | 0               |         |          |         |            |      |                           |                     |          | 38 |
| 39    |             |       |  |        |       |              |                 | 0       |          |         |            |      |                           |                     |          | 40 |
| 41    | 1           |       | SPACE  |        |       |              |                 |         | 0        |         |            |      | SPACE                     | 1                   |          | 42 |
|       |             |       |  |        |       |              | 41, 300         | 39, 505 | 43, 850  |         |            |      |                           | •                   |          |    |
|       |             |       | TOTA   | AL CO  | NNEC' | TED LOAD:    | 124, 655        | VA      | 150 AMPS | •       | FEE        | DER: | EXISTING 4 #350, 1 #4 GNI | ), 3                | " C      |    |
|       |             |       | CALCULATED FEEDER  | R DEM  | AND,  | NEC 220:     | 133, 180        | VA      | 160 AMPS |         |            |      |                           |                     |          |    |

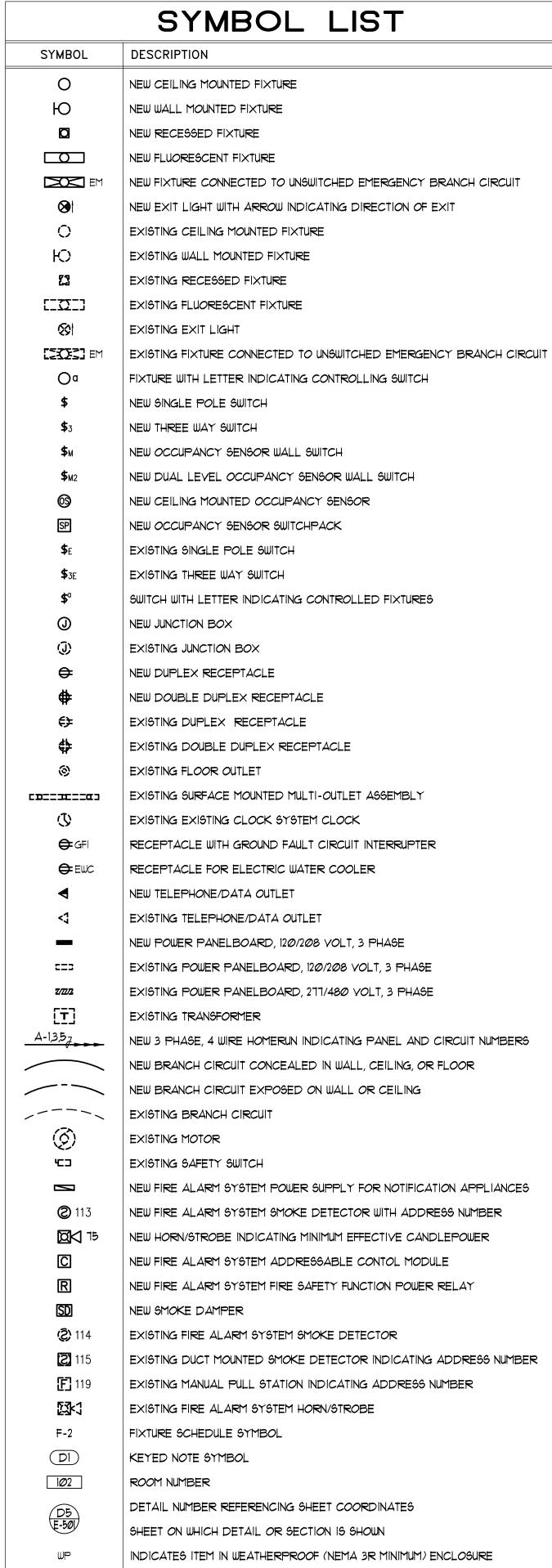
NOTES - EXISTING PANEL 'CC'

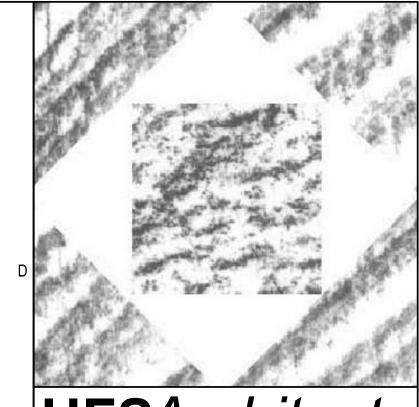
- \* EXISTING CIRCUIT TO REMAIN. FIELD VERIFY LOCATION AND INCLUDE ON NEW TYPEWRITTEN CIRCUIT INDEX.
- + EXISTING CIRCUIT ABANDONED BY DEMOLITION. CONNECT TO NEW CIRCUITS WHERE INDICATED. EXISTING PANEL 'CC' SCHEDULE SHOWN FOR REFERENCE ONLY. FIELD VERIFY ALL CIRCUITS AND LOADS.

|        |  | FIXTUF   | RE SCHEDULE  |                        |
|--------|--|--|--|------------------------|
| SYMBOL | MANUFACTURER   | CATALOG NO.  | DESCRIPTION  | LAMP                   |
| F-1    | METALUX  | 2RDI-332-RP-277-EB82   | 2' x 4', 3 LAMP LAY-IN DIRECT/INDIRECT FLOURESCENT FIXTURE WITH CENTER MOUNT PERFORATED METAL LAMP SHIELD, MATTE WHITE ACRYLIC OVERLAY, AND ONE 2 LAMP & ONE 1 LAMP, 277 VOLT, <10% THD ELECTRONIC BALLASTS WIRED FOR INBOARD/OUTBOARD LAMP OPERATION.   | 3F32T8/TL835           |
| F-2    | METALUX  | 2RDI-232-RP-277-EB81   | 2' x 4', 2 LAMP LAY-IN DIRECT/INDIRECT FLOURESCENT FIXTURE WITH CENTER MOUNT PERFORATED METAL LAMP SHIELD, MATTE WHITE ACRYLIC OVERLAY, AND ONE 2 LAMP, 277 VOLT, <10% THD ELECTRONIC BALLAST.   | 2F32T8/TL835           |
| F-3    | PORTFOLIO  | C7142E-7150/DT7-R-1  | RECESSED COMPACT FLOURESCENT DOWNLIGHT WITH SPECULAR CLEAR LOW IRRIDESCENT ALZAK REFLECTOR, NOMINAL 7" DIAMETER APERATURE, COBALT BLUE DECORATIVE TRIM RING, AND 120-277 VOLT ELECTRONIC BALLAST.  | 1CFM26W/35K            |
| F-4    | CORELITE   | AP-WM-3T8-2C-277-PP15-T1-16-ET   | PENDANT MOUNTED, 3 LAMP ROW, DIRECT/INDIRECT FLOURESCENT FIXTURE WITH PERFORATED METAL DIFFUSER, SEMI-SPECULAR DOWNLIGHT LOUVERS, 15" LONG RIGID PENDANTS, TAPERED END CAPS, AND 277 VOLT, <10% THD ELECTRONIC BALLASTS WIRED FOR INBOARD/OUTBOARD LAMP OPERATION. 16 FT OVERALL LENGTH CONSISTING OF TWO 8 FT SECTIONS. | 12F32T8/TL835          |
| F-5    | CORELITE   | AP-WM-3T8-2C-277-PP15-T1-32-ET   | SAME AS F-4 EXCEPT 32 FT OVERALL LENGTH CONSISTING OF FOUR 8 FT SECTIONS.  | 24F32T8/TL835          |
| F-6    | COLUMBIA<br>DAY-BRITE<br>LIGHTOLIER<br>LITHONIA<br>LSI<br>METALUX            | ST824-232G-FSA12125-EB8LH277<br>2TG8-232-21-277-1/2-EB10I<br>XP2GVI232-277-HI<br>2GT8-232-A12125-277-GEB10<br>GA125-232-SD-SSD10-277<br>2GC8-232A125-277-TEB81 | 2' x 4', 2 LAMP, LAY-IN FLUDRESCENT FIXTURE WITH FLAT STEEL DOOR, 0.125" THICK ACRYLIC PRISMATIC LENS AND ONE 2 LAMP, 277 VOLT, <10% THD ELECTRONIC BALLAST.   | 2F32T8/TL835           |
| F-7    | EXITRONIX<br>LIGHTOLIER<br>LITHONIA<br>MCPHILBEN<br>PRESCOLITE<br>SURE-LITES | G400U-LB-WW LD-A-1-G-W LE-S-W-1-G-120/277 30VL-1-W-G DMX1GAW CX-6-1-G-W  | UNIVERSAL MOUNTED, SINGLE FACE, LIGHT EMITTING DIODE (LED) EXIT LIGHT WITH DIE CAST ALUMINUM HOUSING, WHITE FINISH, GREEN LETTERS ON STENCIL FACE, UNIVERSAL KNOCKOUT CHEVRON ARROWS AND 120/277 DUAL VOLTAGE INPUT.   | FURNISHED<br>W/FIXTURE |

|     |   |      | NEL 'CP'               |         |      | 200%      | RATED NEUT | TRAL FOR NO | N-LINEAR L | DADS |         | 10,000 A. I. C. FUL    |   |      |     |
|-----|---|------|------------------------|---------|------|-----------|------------|-------------|------------|------|---------|------------------------|---|------|-----|
|     |   |      | AQ', BOLT-ON           |         |      |           |            | SSVT HTIW   |            |      |         | 120/208 VOLT, 3 PHASE  |   |      |     |
|     |   |      | 225 AMP MAIN LUGS      |         |      |           |            |             |            |      |         | SURFACE                |   |      | -   |
| CIR |   | RKR  | DESCRIPTION            |         | ND.  | CIRCUIT   |            | ASE LOAD -  |            |      |         |                        |   | BRKR | CIR |
| ND. | Р | AMPS |                        | LTS     | REC  | LOAD      | PHASE A    | PHASE B     | PHASE C    |      | REC LT: | 3                      | P | AMPS |     |
| 1   | 1 | 20   | COMPUTER LAB TABLE 1   |         | 4    | 720       | 1, 440     |             |            | 720  |         | COMPUTER LAB TABLE 2   | 1 | 20   | 2   |
| 3   | Ш |      | COMPUTER LAB TABLE 1   |         | 4    | 720       |            | 1, 440      |            | 720  | 4       | COMPUTER LAB TABLE 2   |   |      | 4   |
| 5   |   |      | COMPUTER LAB TABLE 1   |         | 4    | 720       |            |             | 1,440      | 720  | 4       | COMPUTER LAB TABLE 4   |   |      | 6   |
| 7   |   |      | COMPUTER LAB TABLE 3   |         | 4    | 720       | 1,440      |             |            | 720  | 4       | COMPUTER LAB TABLE 4   |   |      | 8   |
| 9   |   |      | COMPUTER LAB TABLE 3   |         | 4    | 720       |            | 1,440       |            | 720  | 4       | COMPUTER LAB TABLE 6   |   |      | 10  |
| 11  |   |      | COMPUTER LAB TABLE 3   |         | 4    | 720       |            |             | 1,440      | 720  | 4       | COMPUTER LAB TABLE 6   |   |      | 12  |
| 13  |   |      | COMPUTER LAB TABLE 5   |         | 4    | 720       | 1,440      |             |            | 720  | 4       | COMPUTER LAB TABLE 8   |   |      | 14  |
| 15  |   |      | COMPUTER LAB TABLE 5   |         | 4    | 720       |            | 1,440       |            | 720  | 4       | COMPUTER LAB TABLE 8   |   |      | 16  |
| 17  |   |      | COMPUTER LAB TABLE 5   |         | 4    | 720       |            |             | 1, 440     | 720  | 4       | COMPUTER LAB TABLE 10  |   |      | 18  |
| 19  |   |      | COMPUTER LAB TABLE 7   |         | 4    | 720       | 1,440      |             |            | 720  | 4       | COMPUTER LAB TABLE 10  |   |      | 20  |
| 21  |   |      | COMPUTER LAB TABLE 7   |         | 4    | 720       |            | 1,440       |            | 720  | 4       | COMPUTER LAB TABLE 12  |   |      | 22  |
| 23  |   |      | COMPUTER LAB TABLE 7   |         | 4    | 720       |            |             | 1,440      | 720  | 4       | COMPUTER LAB TABLE 12  |   |      | 24  |
| 25  |   |      | COMPUTER LAB TABLE 9   |         | 4    | 720       | 1,440      |             |            | 720  | 4       | COMPUTER LAB TABLE 11  |   |      | 26  |
| 27  |   |      | COMPUTER LAB TABLE 9   |         | 4    | 720       |            | 1,440       |            | 720  | 4       | COMPUTER LAB TABLE 11  |   |      | 28  |
| 29  |   |      | COMPUTER LAB TABLE 9   |         | 4    | 720       |            |             | 1,440      | 720  | 4       | COMPUTER LAB TABLE 11  |   |      | 30  |
| 31  |   |      | REC, STORAGE, COMP LAB |         | 2    | 360       | 360        |             |            |      |         | SPARE                  |   |      | 32  |
| 33  |   |      | SPARE                  |         |      |           |            | 0           |            |      |         | SPARE                  |   |      | 34  |
| 35  | 1 | 20   | SPARE                  |         |      |           |            |             | 0          |      |         | SPARE                  | 1 | 20   | 36  |
| 37  | 1 |      | SPACE                  |         |      |           | 0          |             |            |      |         | SPACE                  | 1 |      | 38  |
| 39  | 1 |      | SPACE                  |         |      |           |            | 0           |            |      |         | SPACE                  | 1 |      | 40  |
| 41  | 1 |      | SPACE                  |         |      |           |            |             | 0          |      |         | SPACE                  | 1 |      | 42  |
|     |   |      |                        |         |      |           | 7, 560     | 7, 200      | 7, 200     |      |         | •                      |   | •    |     |
|     |   |      | ΤΠΤΔΙ                  | СПИ     | NFC- | TED LOAD: | 21, 960    |             | 61 AMPS    |      | FFFDFR  | R: 3 #2, 2 #2 NEUTRAL, |   |      |     |
|     |   |      | CALCULATED FEEDER      |         |      |           | 27, 360    |             | 76 AMPS    |      |         | 1 #4 GND, 2" C         |   |      |     |
|     |   |      | CHECOEMIED LEEDEK      | ואויוםע | עעוו | ואבט בבטי | ۲, 360     | ٧H          | 10 AMICS   |      |         | ו איז טועט, ב כ        |   |      |     |







## **HFS**Architects

ARCHITECTURE
INTERIORS
PLANNING

1484 South State Salt Lake City, Utah 84115 801-596-0691/F: 596-0693 www.hfsa.com

CONSULTANT

#### **ELECTRICAL**

THOMAS & KOLKMAN ENG. CO. INC. 64 West 1700 South Salt Lake City, Utah 84115 801-484-8161/ F. 484-3538

# TESTING & ASSESSMENT CENTER REMODEL

Salt Lake Community College Redwood Campus Salt Lake City, Utah

MARK DATE DESCRIPTION DATE: 23 JULY 2007 **AGENCY PROJECT NO:** 07033660 0719.01 HFSA PROJECT NO: CAD DWG FILE NO: EE0719 E-601.dwg DRAWN BY: W.B.G CHECKED BY: R.G.K **DESIGNED BY:** W.B.G.

DWG TYPE: ELECTRICAL
ARCHITECTURAL PHASE:
CONSTRUCTION DOCUMENTS BID SET
SHEET TITLE

SYMBOL LIST, SCHEDULES AND RISER DIAGRAMS

E-601

5 OF 5

SHEET

POWER RISER DIAGRAM

SCHEMATIC

2